

GenCore version 5.1.6
Copyright (c) 1993 - 2004 CompuGen Ltd.

QW nucleic - nucleic search, using sw model

Run on: October 18, 2004, 14:25:52 ; Search time 3 Seconds
(without alignments)
2.138 Million cell updates/sec

Title: US-09-695-451-1

Perfect score: 73

Sequence: 1 cctgtgcatcttcttgggt.....atgtatgcgtaccacgggtg 73

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 0.5

Searched: 3298 seqs, 43931 residues

Total number of hits satisfying chosen parameters: 6596

Minimum DB seq length: 8

Maximum DB seq length: 30

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 3300 summaries

Database : rng1-899.seq:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
C 1	18	24.7	18	1	AAZ48533
C 2	18	24.7	18	1	AAZ48528
C 3	18	24.7	18	1	AAZ48532
C 4	18	24.7	18	1	AAZ48529
C 5	18	24.7	18	1	AAZ48531
C 6	18	24.7	18	1	AAZ48530
C 7	18	24.7	18	1	ABT05026
C 8	18	24.7	18	1	ABT05029
C 9	18	24.7	18	1	ABT05103
C 10	18	24.7	18	1	ABT05091
C 11	18	24.7	18	1	ABT05098
C 12	18	24.7	18	1	ABT05093
C 13	18	24.7	18	1	ABT05100
C 14	18	24.7	18	1	ABT05096
C 15	18	24.7	18	1	ABT05028
C 16	18	24.7	18	1	ABT05094
C 17	18	24.7	18	1	ABT05097
C 18	18	24.7	18	1	ABT05024
C 19	18	24.7	18	1	ABT05027
C 20	18	24.7	18	1	ABT05101
C 21	18	24.7	18	1	ABT05102
C 22	18	24.7	18	1	ABT05025
C 23	18	24.7	18	1	ABT05090
C 24	18	24.7	18	1	ABT05099
C 25	18	24.7	18	1	ABT05092
C 26	18	24.7	18	1	ABT05095
C 27	18	24.7	18	1	ABK16809
C 28	17.6	23.1	24	1	ABK16809
C 29	17	23.3	25	1	ABZ30031
C 30	15.8	21.6	20	1	ABT05171
C 31	15.8	21.6	22	1	AAV51522
C 32	15.4	21.1	17	1	AAZ74507
C 33	15.4	21.1	17	1	ACD50663

C 34	15.4	21.1	20	1	AAF56086
C 35	15.2	20.8	23	1	ABZ24499
C 36	15.2	20.8	23	1	ABZ68856
C 37	15	20.5	19	1	AAV10706
C 38	15	20.5	20	1	AAV14301
C 39	15	20.5	20	1	AAV09117
C 40	15	20.5	20	1	AAH77555
C 41	15	20.5	23	1	AAH78929
C 42	14.6	20.0	21	1	AAV76633
C 43	14.6	20.0	21	1	AAV65844
C 44	14.6	20.0	21	1	AAV53955
C 45	14.6	20.0	21	1	AAV24557
C 46	14.6	20.0	21	1	ADE52901
C 47	14.6	20.0	21	1	ADA66182
C 48	14.4	19.7	17	1	ACD50662
C 49	14.4	19.7	17	1	ACD50664
C 50	14.4	19.7	20	1	AAV22562
C 51	14.4	19.7	20	1	AAA90791
C 52	14.4	19.7	22	1	AAV51523
C 53	14.2	19.5	19	1	AAV16173
C 54	14.2	19.5	20	1	AAV11921
C 55	14.2	19.5	20	1	AAV11923
C 56	14.2	19.5	20	1	AAV37207
C 57	14.2	19.5	21	1	AAV97999
C 58	14	19.2	20	1	ABK89166
C 59	13.8	18.9	20	1	AAF56085
C 60	13.8	18.9	20	1	ADD89934
C 61	13.6	18.6	20	1	AAV05983
C 62	13.6	18.6	20	1	AAV95277
C 63	13.6	18.6	20	1	AAV10302
C 64	13.6	18.6	20	1	ABL43747
C 65	13.6	18.6	20	1	ABT05172
C 66	13.6	18.6	20	1	ABZ93185
C 67	13.6	18.6	20	1	AAV48785
C 68	13.4	18.4	17	1	ABA77114
C 69	13.4	18.4	17	1	ABA77113
C 70	13.4	18.4	17	1	ACD53467
C 71	13.4	18.4	17	1	ACD52078
C 72	13.4	18.4	19	1	ACA98830
C 73	13.4	18.4	19	1	ACA98827
C 74	13.4	18.4	20	1	AAV36631
C 75	13.4	18.4	20	1	AAV40931
C 76	13.2	18.1	18	1	AAV61163
C 77	13.2	18.1	19	1	AAV12832
C 78	13.2	18.1	19	1	AAV02643
C 79	13.2	18.1	19	1	AAV35894
C 80	13.2	18.1	20	1	AAV49792
C 81	13.2	18.1	20	1	AAV93390
C 82	13.2	18.1	20	1	AAV16412
C 83	13.2	18.1	20	1	ABZ21766
C 84	13.2	18.1	20	1	ABZ98885
C 85	13.2	18.1	20	1	ABZ43679
C 86	13	17.8	17	1	ABZ42940
C 87	13	17.8	19	1	ACA98826
C 88	13	17.8	19	1	ACA98829
C 89	12.8	17.5	17	1	ABV83095
C 90	12.8	17.5	17	1	ABV83096
C 91	12.8	17.5	17	1	ABT38079
C 92	12.8	17.5	17	1	ABZ60690
C 93	12.8	17.5	17	1	ABZ43905
C 94	12.8	17.5	18	1	AAV12463
C 95	12.8	17.5	18	1	AAZ41037
C 96	12.8	17.5	18	1	AAZ22131
C 97	12.8	17.5	18	1	ABK88473
C 98	12.8	17.5	18	1	ABK15756
C 99	12.8	17.5	18	1	ABS57306
C 100	12.8	17.5	18	1	AAD60507
C 101	12.8	17.5	19	1	AAZ75939
C 102	12.4	17.0	15	1	AAF49432
C 103	12.4	17.0	15	1	AAV49431
C 104	12.4	17.0	17	1	ABV83098
C 105	12.4	17.0	17	1	ABV83097
C 106	12.4	17.0	17	1	ABT36385

HBV DNA polymerase
Mouse Oct 3/4 forw
Forward PCR primer
Human breast cancer
Probe HBPr135 for
Hepatitis B virus
HBV HBPol/HBAG re
Human immunodefici
Pyrococcus woesei
Nucleotide sequenc
PCR primer for DNA
FEN-1 related DNA
DNAP-related oligo
HBV hammerhead rib
HBV hammerhead rib
Antisense oligonuc
Ribonucleotide red
Zea mays genome fo
Bacterial cell ide
Hepatocyte growth
Hepatocyte growth
Human MEXK4 antis
Murine SAC1 gene-s
Human JAZF1 PCR pr
HBV DNA polymerase
Murine GABA transp
Human MAPK kinase
PCR primer used to
Antisense oligonuc
Human chromosome 1
TNFR1 expression m
Human PD54C oligon
YacM gene specific
Retinoblastoma mut
Retinoblastoma mut
HBV G-cleaver subs
HBV inozyme subatr
Human CYP2C8 SNP d
Human CYP2C8 SNP d
Human HDAl antis
Human SR-cyp antis
Human chromosome a
Probe to human leu
S. epidermidis 16S
HIV gag CA and NC
Mouse haematopoiet
PCR primer used to
Haematopoietic mar
Serine/threonine k
Human PDE4A oligon
Human KNSL1 sequen
Human K-Ras DNazym
Human CYP2C8 SNP d
Human CYP2C8 SNP d
Human HTPL scannin
Human HTPL scannin
Tumour suppression
Human K-Ras DNazym
Human HP4 prostaagl
Cellular inhibitor
Human c-IAP-2 mRNA
Human HP4 prostaagl
Prostaglandin rece
PCR primer #2 for
Human c-IAP-2 anti
Human biallelic ma
IGF-I oligonucleot
IGF-I oligonucleot
Human HTPL scannin
Human HTPL scannin
Tumour suppression

107	12.4	17.0	17	1	ACDS0661	HBV hammerhead rib	180	11.8	16.2	18	1	AAZ72264	Human biallelic ma
108	12.4	17.0	17	1	ACSG7296	Murine oligonucleo	181	11.8	16.2	18	1	AAZ92572	Antisense oligonuc
109	12.4	17.0	17	1	ADB42368	Tumour suppression	182	11.8	16.2	18	1	ABZ10580	Haematopoietic cel
110	12.4	17.0	17	1	ADB40322	Tumour suppression	183	11.8	16.2	18	1	ABZ10579	Haematopoietic cel
111	12.4	17.0	17	1	ADB40653	Tumour suppression	184	11.8	16.2	18	1	ADC70095	Primer oligo used
112	12.4	17.0	17	1	ADB44348	Tumour suppression	185	11.8	16.2	18	1	ADC70094	Primer oligo used
113	12.4	17.0	17	1	AAT09038	Arabidopsis thalia	186	11.8	16.2	18	1	ADB84422	Human lymphoid cel
114	12.4	17.0	18	1	AAO10174	Human anti-angioge	187	11.8	16.2	18	1	ADB84421	Human lymphoid cel
115	12.4	17.0	18	1	ABL41558	Primer #3 related	188	11.6	15.9	17	1	AAQ40484	PCR primer for the
116	12.4	17.0	18	1	ABL41557	Primer #2 related	189	11.6	15.9	17	1	ACC64682	Murine oligonucleo
117	12.4	17.0	18	1	AAS16281	Mouse LiCAl cytopl	190	11.4	15.6	13	1	ABC25843	Oligonucleotide SE
118	12.4	17.0	19	1	AAQ20515	H-ras ribozyme pro	191	11.4	15.6	13	1	ABC35597	Oligonucleotide SE
119	12.4	17.0	19	1	AAZ72894	Human biallelic ma	192	11.4	15.6	13	1	ABF33003	Oligonucleotide SE
120	12.2	16.7	17	1	AAQ11387	Probe COD 931 spec	193	11.4	15.6	13	1	ABC54454	Oligonucleotide SE
121	12.2	16.7	17	1	AAQ211838	Antisense polyamin	194	11.4	15.6	13	1	ABC25842	Oligonucleotide SE
122	12.2	16.7	17	1	AAQ57302	Enzymatic RNA mole	195	11.4	15.6	13	1	ABC40096	Oligonucleotide SE
123	12.2	16.7	17	1	AAO101734	Peptide nucleic ac	196	11.4	15.6	13	1	ABC40097	Oligonucleotide SE
124	12.2	16.7	17	1	AAAI18977	Human TIE-2 substr	197	11.4	15.6	13	1	ABC20177	Oligonucleotide SE
125	12.2	16.7	17	1	AAV93545	Human B-raf substr	198	11.4	15.6	13	1	ABF31356	Oligonucleotide SE
126	12.2	16.7	17	1	AAV36202	Human genomic SNP	199	11.4	15.6	13	1	ABF31302	Oligonucleotide SE
127	12.2	16.7	17	1	ABK56419	Human CiCAl gene e	200	11.4	15.6	13	1	ABF31357	Oligonucleotide SE
128	12.2	16.7	17	1	ABT40203	Tumour suppression	201	11.4	15.6	13	1	ABC35596	Oligonucleotide SE
129	12.2	16.7	17	1	ACD61716	HCV minus strand D	202	11.4	15.6	13	1	ABC20176	Oligonucleotide SE
130	12.2	16.7	17	1	ADB43899	Tumour suppression	203	11.4	15.6	13	1	ABC54455	Oligonucleotide SE
131	12.2	16.7	17	1	ADC04003	Human Na/H exchang	204	11.4	15.6	15	1	AAAT37613	Apo(a) mRNA (nt. p
132	12.2	16.7	17	1	ADC04000	Human Na/H exchang	205	11.4	15.6	15	1	AAAT37615	Apo(a) mRNA (nt. p
133	12.2	16.7	18	1	AAI15196	Triple helix formi	206	11.4	15.6	15	1	AAAT35030	Triplex-forming ol
134	12.2	16.7	18	1	AAK61956	Type-specific HPV	207	11.4	15.6	15	1	AAK34457	Template sequence
135	12.2	16.7	18	1	AAK86642	Cdc 2 kinase hamme	208	11.4	15.6	15	1	AAA26829	Trichosporon aquat
136	12.2	16.7	18	1	AAA86643	Cdc 2 kinase hamme	209	11.4	15.6	15	1	AAAF49433	IGF-I oligonucleot
137	12.2	16.7	18	1	AAK96645	Cdc 2 kinase hamme	210	11.4	15.6	15	1	AAAF49430	IGF-I oligonucleot
138	12.2	16.7	18	1	AAZ71566	Human biallelic ma	211	11.4	15.6	15	1	AAF70053	Human TNFRSF11B ge
139	12.2	16.7	18	1	AAZ72820	Human biallelic ma	212	11.4	15.6	15	1	AAK69384	Human IL4Ralpha ge
140	12.2	16.7	18	1	AAI14539	Tobacco rbcl PCR p	213	11.4	15.6	15	1	AAI57627	Human SCYA24 ASO p
141	12.2	16.7	18	1	AAH61808	Cdc 2 kinase hamme	214	11.4	15.6	17	1	AAA18974	Human TIE-2 substr
142	12.2	16.7	18	1	AAH61811	Cdc 2 kinase hamme	215	11.4	15.6	17	1	AAA20484	Integrin alpha 6 s
143	12.2	16.7	18	1	AAH61809	Cdc 2 kinase hamme	216	11.4	15.6	17	1	AAA18976	Human TIE-2 substr
144	12.2	16.7	18	1	ACA60651	Antisense inhibiti	217	11.4	15.6	17	1	AAA18975	Integrin alpha 6 s
145	12.2	16.7	18	1	AAK94553	23S/16S rRNA dete	218	11.4	15.6	17	1	AAA20482	Integrin alpha 6 s
146	12.2	16.7	18	1	ADB84612	Human mitogen-acti	219	11.4	15.6	17	1	AAA20483	Integrin alpha 6 s
147	12.2	16.7	18	1	ADC98654	Tobacco rbcl PCR p	220	11.4	15.6	17	1	ABK02835	Human CD20 Hammer
148	12.2	16.4	12	1	ABK39583	Oligonucleotide pr	221	11.4	15.6	17	1	ABK03202	Human CD20 Inozyme
149	12.2	16.4	15	1	AAZ75700	Human fit-1 and KD	222	11.4	15.6	17	1	ABK25223	Male-sterile plant
150	12.2	16.4	15	1	AAZ65580	Immunosuppressant	223	11.4	15.6	17	1	ABK25224	Male-sterile plant
151	12.2	16.4	15	1	AAZ48241	IGFBP3 oligonucleo	224	11.4	15.6	17	1	ABV83099	Human HTPL scannin
152	12.2	16.4	15	1	AAZ48238	IGFBP3 oligonucleo	225	11.4	15.6	17	1	ACC53051	Human tumour suppr
153	12.2	16.4	15	1	AAZ48239	IGFBP3 oligonucleo	226	11.4	15.6	17	1	ACC54365	Human tumour suppr
154	12.2	16.4	15	1	AAZ48240	IGFBP3 oligonucleo	227	11.4	15.6	17	1	ACC52797	Tumour suppression
155	12.2	16.4	17	1	AAZ68749	Human fit1 VEGF re	228	11.4	15.6	17	1	ABT39688	Tumour suppression
156	12.2	16.4	17	1	AAZ68750	Human fit1 VEGF re	229	11.4	15.6	17	1	ABT37482	Tumour suppression
157	12.2	16.4	17	1	AAZ68751	Human fit1 VEGF re	230	11.4	15.6	17	1	ACD50660	HBV hammerhead rib
158	12.2	16.4	17	1	ACC65172	Murine oligonucleo	231	11.4	15.6	17	1	ACD50665	HBV hammerhead rib
159	12.2	16.4	18	1	AAZ30575	Human integrin alp	232	11.4	15.6	17	1	ACD64925	Murine oligonucleo
160	12.2	16.4	18	1	AAI10237	Antisense oligonuc	233	11.4	15.6	17	1	ADB44108	Tumour suppression
161	11.8	16.2	15	1	AAV48734	ERB-2 gene antise	234	11.4	15.6	17	1	ADB42008	Tumour suppression
162	11.8	16.2	15	1	AAZ52178	IGF-I oligonucleot	235	11.4	15.6	17	1	ADB45411	Tumour suppression
163	11.8	16.2	16	1	AAI166199	Peptide nucleic ac	236	11.4	15.6	17	1	ADB44471	Tumour suppression
164	11.8	16.2	16	1	ABT14523	Rhesus monkey p-gl	237	11.4	15.6	17	1	ADC70411	Primer oligo used
165	11.8	16.2	16	1	ADP07218	Zoster virus IRF-1	238	11.4	15.6	17	1	ADC70430	PCR primer 2 used
166	11.8	16.2	17	1	AAH81529	Human c-myb hamme	239	11.4	15.6	17	1	ADC70409	Primer oligo used
167	11.8	16.2	17	1	AAH69124	Human fit1 VEGF re	240	11.2	15.3	16	1	AAA40694	Human CD36 polymor
168	11.8	16.2	17	1	AAV11899	L. lactis NS3 locu	241	11.2	15.3	17	1	AAQ36488	Mycoplasma primer/
169	11.8	16.2	17	1	AAA21146	Integrin alpha 6 s	242	11.2	15.3	17	1	AAQ47888	SSP for flavonoid-
170	11.8	16.2	17	1	AAZ21147	Human B-raf substr	243	11.2	15.3	17	1	AAQ72496	Melanoma cell line
171	11.8	16.2	17	1	AAV93544	HBV pre-S gene pro	244	11.2	15.3	17	1	AAQ72496	MAGE PCR primer CH
172	11.8	16.2	17	1	AAK32865	Hammerhead ribozym	245	11.2	15.3	17	1	AAAT81160	Human c-myb hamme
173	11.8	16.2	17	1	ABK07400	Human CD20 G-cleav	246	11.2	15.3	17	1	AAAT81161	Human c-myb hamme
174	11.8	16.2	17	1	ABK03416	Human CD20 Hammer	247	11.2	15.3	17	1	AAAT81530	Human fit1 VEGF re
175	11.8	16.2	17	1	ABK02836	Human CD20 Hammer	248	11.2	15.3	17	1	AAK68824	Human fit1 VEGF re
176	11.8	16.2	17	1	ABK02837	Human HTPL scannin	249	11.2	15.3	17	1	AAK70124	Solanidine glucosy
177	11.8	16.2	17	1	ABV83094	Human K-Ras DNazym	250	11.2	15.3	17	1	AAV95714	Human TIE-2 substr
178	11.8	16.2	17	1	ABZ60689	TRAP5 antisense ol	251	11.2	15.3	17	1	AAA18559	Integrin alpha 6 s
179	11.8	16.2	18	1	AAA55643		252	11.2	15.3	17	1	AAA20759	

253	11.2	15.3	17	1	AAV93546	Human B-raf subutr	326	11	15.1	12	1	ABH91814	Oligonucleotide pr
254	11.2	15.3	17	1	AAH84106	PCR primer for MAG	c 327	11	15.1	12	1	ABH75494	Oligonucleotide pr
255	11.2	15.3	17	1	AAAF36536	Human genomic SNP	328	11	15.1	12	1	ABH108662	Oligonucleotide pr
256	11.2	15.3	17	1	AAAF04245	Hammerhead ribozym	329	11	15.1	12	1	ABH71304	Oligonucleotide pr
257	11.2	15.3	17	1	AAAF04693	Hammerhead ribozym	c 330	11	15.1	12	1	ABH161761	Oligonucleotide pr
258	11.2	15.3	17	1	AAH951137	Human Chk1 ribozym	331	11	15.1	12	1	ABH163498	Oligonucleotide pr
259	11.2	15.3	17	1	AAH95658	Human Chk1 ribozym	c 332	11	15.1	12	1	ABH151405	Oligonucleotide pr
260	11.2	15.3	17	1	ABK02974	Human CD20 Hammerh	c 333	11	15.1	12	1	ABH171629	Oligonucleotide pr
261	11.2	15.3	17	1	ABK02975	Human CD20 Hammerh	334	11	15.1	12	1	ABH144106	Oligonucleotide pr
262	11.2	15.3	17	1	ABK03537	Human CD20 Zinzyme	335	11	15.1	12	1	ABH157944	Oligonucleotide pr
263	11.2	15.3	17	1	ABK07091	Human GDMPLP-1 17-m	336	11	15.1	12	1	ABH108661	Oligonucleotide SE
264	11.2	15.3	17	1	ABK07092	Human GDMPLP-1 17-m	337	11	15.1	13	1	ABH78022	Oligonucleotide SE
265	11.2	15.3	17	1	ABV85535	Human pp-GaNTase 1	c 338	11	15.1	13	1	ABH71907	Oligonucleotide SE
266	11.2	15.3	17	1	ABV85536	Human pp-GaNTase 1	c 339	11	15.1	13	1	ABH71907	Oligonucleotide SE
267	11.2	15.3	17	1	ABK25932	Amino acid overpro	340	11	15.1	13	1	ABH16022	Oligonucleotide SE
268	11.2	15.3	17	1	ABK25931	Amino acid overpro	341	11	15.1	13	1	ABH12113	Oligonucleotide SE
269	11.2	15.3	17	1	ABV82837	Human HTPL scannin	c 342	11	15.1	13	1	ABH12113	Oligonucleotide SE
270	11.2	15.3	17	1	ABV82836	Human HTPL scannin	c 343	11	15.1	13	1	ABH12113	Oligonucleotide SE
271	11.2	15.3	17	1	ABK18613	Human ERG G-cleave	344	11	15.1	13	1	ABH72133	Oligonucleotide SE
272	11.2	15.3	17	1	ABK19015	Human ERG DNazyme	345	11	15.1	13	1	ABH71906	Oligonucleotide SE
273	11.2	15.3	17	1	ABK18354	Human ERG hammerhe	346	11	15.1	13	1	ABH71906	Oligonucleotide SE
274	11.2	15.3	17	1	ABH75096	Human PAPP-Ea asso	c 347	11	15.1	13	1	ABH47707	Oligonucleotide SE
275	11.2	15.3	17	1	ABH75095	Human PAPP-Ea asso	348	11	15.1	13	1	ABH47707	Oligonucleotide SE
276	11.2	15.3	17	1	ABK56283	Human CLCA1 gene e	c 349	11	15.1	13	1	ABH77165	Oligonucleotide SE
277	11.2	15.3	17	1	ABK56418	Human CLCA1 gene e	350	11	15.1	13	1	ABH12112	Oligonucleotide SE
278	11.2	15.3	17	1	ABK56449	Human CLCA1 gene e	c 351	11	15.1	13	1	ABH48209	Oligonucleotide SE
279	11.2	15.3	17	1	ACC52807	Human tumour suppr	352	11	15.1	13	1	ABH47706	Oligonucleotide SE
280	11.2	15.3	17	1	ACC52807	Human tumour suppr	c 353	11	15.1	13	1	ABH47706	Oligonucleotide SE
281	11.2	15.3	17	1	ACC54448	Human tumour suppr	c 354	11	15.1	13	1	ABH72132	Oligonucleotide SE
282	11.2	15.3	17	1	ACC52830	Human tumour suppr	355	11	15.1	13	1	ABH77142	Oligonucleotide SE
283	11.2	15.3	17	1	ABH36591	Tumour suppression	c 356	11	15.1	13	1	ABH78023	Oligonucleotide SE
284	11.2	15.3	17	1	ABH36451	Tumour suppression	c 357	11	15.1	13	1	ABH78023	Oligonucleotide SE
285	11.2	15.3	17	1	ABH38397	Tumour suppression	c 358	11	15.1	13	1	ABH16023	Oligonucleotide SE
286	11.2	15.3	17	1	ABH38397	Tumour suppression	359	11	15.1	15	1	AAH48247	IGFBP3 oligonucleo
287	11.2	15.3	17	1	ABH36373	Tumour suppression	c 360	11	15.1	15	1	AAH48247	IGFBP3 oligonucleo
288	11.2	15.3	17	1	ABH35984	Tumour suppression	c 361	11	15.1	15	1	AAH48247	IGFBP3 oligonucleo
289	11.2	15.3	17	1	ABH37596	Tumour suppression	c 362	11	15.1	15	1	AAH48247	IGFBP3 oligonucleo
290	11.2	15.3	17	1	ABH34478	Tumour suppression	363	11	15.1	16	1	AAQ68033	Human NPY1R gene a
291	11.2	15.3	17	1	ABH38298	Tumour suppression	364	10.8	14.8	14	1	AAQ10578	Human CYP27A1 gene
292	11.2	15.3	17	1	ABH40206	Tumour suppression	365	10.8	14.8	14	1	AAQ10578	Probe for HCV geno
293	11.2	15.3	17	1	ADH99961	Tumour suppression	c 366	10.8	14.8	14	1	AAV48874	Probe for detectin
294	11.2	15.3	17	1	ADH99961	Tumour suppression	c 367	10.8	14.8	15	1	AAQ55453	Oligonucleotide us
295	11.2	15.3	17	1	ADH99958	Human MDZ3 scannin	c 368	10.8	14.8	15	1	AAH57034	ERBB-2 gene antise
296	11.2	15.3	17	1	ADH99960	Human MDZ3 scannin	c 369	10.8	14.8	15	1	AAH57034	Detection primer f
297	11.2	15.3	17	1	ADH99960	Human MDZ3 scannin	370	10.8	14.8	15	1	AAH57034	RSV IC hammerhead
298	11.2	15.3	17	1	ADH99960	Human MDZ3 scannin	c 371	10.8	14.8	15	1	AAH57034	Human B7-1 hamme
299	11.2	15.3	17	1	ADH99960	Human MDZ3 scannin	c 372	10.8	14.8	15	1	AAH57034	Target sequence wi
300	11.2	15.3	17	1	ADH99960	Human MDZ3 scannin	c 373	10.8	14.8	15	1	AAH57034	Cystic fibrosis ge
301	11.2	15.3	17	1	ADH99960	Human MDZ3 scannin	c 374	10.8	14.8	15	1	AAH57034	IGFBP3 oligonucleo
302	11.2	15.3	17	1	ADH99960	Human MDZ3 scannin	c 375	10.8	14.8	15	1	AAH57034	IGF-I oligonucleot
303	11.2	15.3	17	1	ADH99960	Human MDZ3 scannin	c 376	10.8	14.8	15	1	AAH57034	IGF-I oligonucleot
304	11.2	15.3	17	1	ADH99960	Human MDZ3 scannin	c 377	10.8	14.8	15	1	AAH57034	IGFBP3 oligonucleo
305	11.2	15.3	17	1	ADH99960	Human MDZ3 scannin	c 378	10.8	14.8	15	1	AAH57034	IGF-I oligonucleot
306	11.2	15.3	17	1	ADH99960	Human MDZ3 scannin	c 379	10.8	14.8	15	1	AAH57034	IGF-I oligonucleot
307	11.2	15.3	17	1	ADH99960	Human MDZ3 scannin	c 380	10.8	14.8	15	1	AAH57034	IGFBP3 oligonucleo
308	11.2	15.3	17	1	ADH99960	Human MDZ3 scannin	c 381	10.8	14.8	15	1	AAH57034	IGF-I oligonucleot
309	11.2	15.3	17	1	ADH99960	Human MDZ3 scannin	c 382	10.8	14.8	15	1	AAH57034	IGF-I oligonucleot
310	11.2	15.3	17	1	ADH99960	Human MDZ3 scannin	c 383	10.8	14.8	15	1	AAH57034	Human TNFRSF11B ge
311	11.2	15.3	17	1	ADH99960	Human MDZ3 scannin	c 384	10.8	14.8	15	1	AAH57034	Human TNFRSF11B ge
312	11.2	15.3	17	1	ADH99960	Human MDZ3 scannin	c 385	10.8	14.8	15	1	AAH57034	ASO probe for plat
313	11.2	15.3	17	1	ADH99960	Human MDZ3 scannin	c 386	10.8	14.8	15	1	AAH57034	HBV enzymatic nucl
314	11.2	15.3	17	1	ADH99960	Human MDZ3 scannin	c 387	10.6	14.5	15	1	AAH57034	HBV enzymatic nucl
315	11.2	15.3	17	1	ADH99960	Human MDZ3 scannin	c 388	10.6	14.5	15	1	AAH57034	Human CTR related
316	11.2	15.3	17	1	ADH99960	Human MDZ3 scannin	c 389	10.4	14.2	12	1	AAH57034	Human CTR related
317	11.2	15.3	17	1	ADH99960	Human MDZ3 scannin	390	10.4	14.2	12	1	AAH57034	Maize heartbreaker
318	11.2	15.3	17	1	ADH99960	Human MDZ3 scannin	c 391	10.4	14.2	12	1	AAH57034	Colony stimulating
319	11.2	15.3	17	1	ADH99960	Human MDZ3 scannin	c 392	10.4	14.2	12	1	AAH57034	Triple helix formi
320	11.2	15.3	17	1	ADH99960	Human MDZ3 scannin	c 393	10.4	14.2	12	1	AAH57034	Oligonucleotide pr
321	11.2	15.3	17	1	ADH99960	Human MDZ3 scannin	c 394	10.4	14.2	12	1	AAH57034	Oligonucleotide pr
322	11.2	15.3	17	1	ADH99960	Human MDZ3 scannin	c 395	10.4	14.2	12	1	AAH57034	Oligonucleotide pr
323	11.2	15.3	17	1	ADH99960	Human MDZ3 scannin	c 396	10.4	14.2	12	1	AAH57034	Oligonucleotide pr
324	11.2	15.3	17	1	ADH99960	Human MDZ3 scannin	c 397	10.4	14.2	12	1	AAH57034	Oligonucleotide pr
325	11.2	15.3	17	1	ADH99960	Human MDZ3 scannin	398	10.4	14.2	12	1	AAH57034	Oligonucleotide pr
						VEGF derived short							

691	10	13.7	12	1	ABI59029	oligonucleotide pr	764	10	13.7	13	1	ABCI9220	oligonucleotide SE
692	10	13.7	12	1	ABI63458	oligonucleotide pr	765	10	13.7	13	1	ABC11701	oligonucleotide SE
693	10	13.7	12	1	ABI63849	oligonucleotide pr	766	10	13.7	13	1	ABC59028	oligonucleotide SE
694	10	13.7	12	1	ABH99357	oligonucleotide pr	767	10	13.7	13	1	ABC35309	oligonucleotide SE
695	10	13.7	12	1	ABI44660	oligonucleotide pr	768	10	13.7	13	1	ABC85749	oligonucleotide SE
696	10	13.7	12	1	ABI21238	oligonucleotide pr	769	10	13.7	13	1	ABC86878	oligonucleotide SE
697	10	13.7	12	1	ABI46731	oligonucleotide pr	770	10	13.7	13	1	ABF18110	oligonucleotide SE
698	10	13.7	12	1	ABI49907	oligonucleotide pr	771	10	13.7	13	1	ABF18111	oligonucleotide SE
699	10	13.7	12	1	ABI30324	oligonucleotide pr	772	10	13.7	13	1	ABF36795	oligonucleotide SE
700	10	13.7	12	1	ABH96027	oligonucleotide pr	773	10	13.7	13	1	ABF38702	oligonucleotide SE
701	10	13.7	12	1	ABI26759	oligonucleotide pr	774	10	13.7	13	1	ABH22127	oligonucleotide SE
702	10	13.7	12	1	ABI56394	oligonucleotide pr	775	10	13.7	13	1	ABF52554	oligonucleotide SE
703	10	13.7	12	1	ABI63850	oligonucleotide pr	776	10	13.7	13	1	ABC47694	oligonucleotide SE
704	10	13.7	12	1	ABH69829	oligonucleotide pr	777	10	13.7	13	1	ABC27054	oligonucleotide SE
705	10	13.7	12	1	ABI73953	oligonucleotide pr	778	10	13.7	13	1	ABC88696	oligonucleotide SE
706	10	13.7	12	1	ABI131508	oligonucleotide pr	779	10	13.7	13	1	ABF36794	oligonucleotide SE
707	10	13.7	12	1	ABI73820	oligonucleotide pr	780	10	13.7	13	1	ABH22126	oligonucleotide SE
708	10	13.7	12	1	ABI03883	oligonucleotide pr	781	10	13.7	13	1	ABH22127	oligonucleotide SE
709	10	13.7	12	1	ABI10334	oligonucleotide pr	782	10	13.7	13	1	ABH54691	oligonucleotide SE
710	10	13.7	12	1	ABI68556	oligonucleotide pr	783	10	13.7	13	1	ABC52262	oligonucleotide SE
711	10	13.7	12	1	ABI36452	oligonucleotide pr	784	10	13.7	13	1	ABC88697	oligonucleotide SE
712	10	13.7	12	1	ABH91718	oligonucleotide pr	785	10	13.7	13	1	ABF13833	oligonucleotide SE
713	10	13.7	13	1	ABC85748	oligonucleotide SE	786	10	13.7	13	1	ABF25029	oligonucleotide SE
714	10	13.7	13	1	ABF38703	oligonucleotide SE	787	10	13.7	13	1	ABF26974	oligonucleotide SE
715	10	13.7	13	1	ABH04494	oligonucleotide SE	788	10	13.7	13	1	ABF26975	oligonucleotide SE
716	10	13.7	13	1	ABF80945	oligonucleotide SE	789	10	13.7	13	1	ABF35913	oligonucleotide SE
717	10	13.7	13	1	ABC45854	oligonucleotide SE	790	10	13.7	13	1	ABH22125	oligonucleotide SE
718	10	13.7	13	1	ABF02349	oligonucleotide SE	791	10	13.7	13	1	ABH02152	oligonucleotide SE
719	10	13.7	13	1	ABF04505	oligonucleotide SE	792	10	13.7	13	1	ABH04495	oligonucleotide SE
720	10	13.7	13	1	ABF04505	oligonucleotide SE	793	10	13.7	13	1	ABH59078	oligonucleotide SE
721	10	13.7	13	1	ABF04505	oligonucleotide SE	794	10	13.7	13	1	ABCI9221	oligonucleotide SE
722	10	13.7	13	1	ABF09013	oligonucleotide SE	795	10	13.7	13	1	ABC44938	oligonucleotide SE
723	10	13.7	13	1	ABC59029	oligonucleotide SE	796	10	13.7	13	1	ABC45855	oligonucleotide SE
724	10	13.7	13	1	ABC63810	oligonucleotide SE	797	10	13.7	13	1	ABC50965	oligonucleotide SE
725	10	13.7	13	1	ABF45133	oligonucleotide SE	798	10	13.7	13	1	ABC03477	oligonucleotide SE
726	10	13.7	13	1	ABH20194	oligonucleotide SE	799	10	13.7	13	1	ABF09290	oligonucleotide SE
727	10	13.7	13	1	ABH03510	oligonucleotide SE	800	10	13.7	13	1	ABF09291	oligonucleotide SE
728	10	13.7	13	1	ABH06011	oligonucleotide SE	801	10	13.7	13	1	ABF09291	oligonucleotide SE
729	10	13.7	13	1	ABH32116	oligonucleotide SE	802	10	13.7	13	1	ABC35308	oligonucleotide SE
730	10	13.7	13	1	ABF82791	oligonucleotide SE	803	10	13.7	13	1	ABF74316	oligonucleotide SE
731	10	13.7	13	1	ABC44939	oligonucleotide SE	804	10	13.7	13	1	ABF52555	oligonucleotide SE
732	10	13.7	13	1	ABC20523	oligonucleotide SE	805	10	13.7	13	1	ABH04333	oligonucleotide SE
733	10	13.7	13	1	ABC98228	oligonucleotide SE	806	10	13.7	13	1	ABF61636	oligonucleotide SE
734	10	13.7	13	1	ABC26065	oligonucleotide SE	807	10	13.7	13	1	ABC71247	oligonucleotide SE
735	10	13.7	13	1	ABC03476	oligonucleotide SE	808	10	13.7	13	1	ABC26064	oligonucleotide SE
736	10	13.7	13	1	ABC54942	oligonucleotide SE	809	10	13.7	13	1	ABC50964	oligonucleotide SE
737	10	13.7	13	1	ABF99923	oligonucleotide SE	810	10	13.7	13	1	ABF32039	oligonucleotide SE
738	10	13.7	13	1	ABH25091	oligonucleotide SE	811	10	13.7	13	1	ABF69465	oligonucleotide SE
739	10	13.7	13	1	ABF80420	oligonucleotide SE	812	10	13.7	13	1	ABC52263	oligonucleotide SE
740	10	13.7	13	1	ABH06010	oligonucleotide SE	813	10	13.7	13	1	ABC27473	oligonucleotide SE
741	10	13.7	13	1	ABH32117	oligonucleotide SE	814	10	13.7	13	1	ABC31700	oligonucleotide SE
742	10	13.7	13	1	ABF61637	oligonucleotide SE	815	10	13.7	13	1	ABF13832	oligonucleotide SE
743	10	13.7	13	1	ABH59074	oligonucleotide SE	816	10	13.7	13	1	ABF18108	oligonucleotide SE
744	10	13.7	13	1	ABC98229	oligonucleotide SE	817	10	13.7	13	1	ABH25090	oligonucleotide SE
745	10	13.7	13	1	ABC64096	oligonucleotide SE	818	10	13.7	13	1	ABH04673	oligonucleotide SE
746	10	13.7	13	1	ABF25028	oligonucleotide SE	819	10	13.7	13	1	ABH61067	oligonucleotide SE
747	10	13.7	13	1	ABC64097	oligonucleotide SE	820	10	13.7	13	1	ABC27472	oligonucleotide SE
748	10	13.7	13	1	ABH18305	oligonucleotide SE	821	10	13.7	13	1	ABC86879	oligonucleotide SE
749	10	13.7	13	1	ABF45132	oligonucleotide SE	822	10	13.7	13	1	ABH20195	oligonucleotide SE
750	10	13.7	13	1	ABF99922	oligonucleotide SE	823	10	13.7	13	1	ABH23313	oligonucleotide SE
751	10	13.7	13	1	ABH02153	oligonucleotide SE	824	10	13.7	13	1	ABH71246	oligonucleotide SE
752	10	13.7	13	1	ABH04332	oligonucleotide SE	825	10	13.7	13	1	ABF18109	oligonucleotide SE
753	10	13.7	13	1	ABF83110	oligonucleotide SE	826	10	13.7	13	1	ABF18585	oligonucleotide SE
754	10	13.7	13	1	ABH47963	oligonucleotide SE	827	10	13.7	13	1	ABF69464	oligonucleotide SE
755	10	13.7	13	1	ABH59075	oligonucleotide SE	828	10	13.7	13	1	ABF69932	oligonucleotide SE
756	10	13.7	13	1	ABH59079	oligonucleotide SE	829	10	13.7	13	1	ABF69933	oligonucleotide SE
757	10	13.7	13	1	ABC93984	oligonucleotide SE	830	10	13.7	13	1	ABF70153	oligonucleotide SE
758	10	13.7	13	1	ABF01976	oligonucleotide SE	831	10	13.7	13	1	ABH22124	oligonucleotide SE
759	10	13.7	13	1	ABF94202	oligonucleotide SE	832	10	13.7	13	1	ABC27055	oligonucleotide SE
760	10	13.7	13	1	ABF97925	oligonucleotide SE	833	10	13.7	13	1	ABF04504	oligonucleotide SE
761	10	13.7	13	1	ABF80944	oligonucleotide SE	834	10	13.7	13	1	ABC30230	oligonucleotide SE
762	10	13.7	13	1	ABF83111	oligonucleotide SE	835	10	13.7	13	1	ABC59596	oligonucleotide SE
763	10	13.7	13	1	ABF83111	oligonucleotide SE	836	10	13.7	13	1	ABC63811	oligonucleotide SE

837	10	13.7	13	1	ABF18584	Oligonucleotide SE	910	9.8	13.4	13	1	ABC99317	Oligonucleotide SE
838	10	13.7	13	1	ABF32038	Oligonucleotide SE	c 911	9.8	13.4	13	1	ABC52723	Oligonucleotide SE
839	10	13.7	13	1	ABF70152	Oligonucleotide SE	c 912	9.8	13.4	13	1	ABC07406	Oligonucleotide SE
c 840	10	13.7	13	1	ABF74917	Oligonucleotide SE	913	9.8	13.4	13	1	ABC07561	Oligonucleotide SE
c 841	10	13.7	13	1	ABH04672	Oligonucleotide SE	c 914	9.8	13.4	13	1	ABC84498	Oligonucleotide SE
c 842	10	13.7	13	1	ABF82790	Oligonucleotide SE	915	9.8	13.4	13	1	ABC85461	Oligonucleotide SE
843	10	13.7	13	1	ABH54690	Oligonucleotide SE	c 916	9.8	13.4	13	1	ABF12123	Oligonucleotide SE
844	10	13.7	13	1	ABH61066	Oligonucleotide SE	c 917	9.8	13.4	13	1	ABF12973	Oligonucleotide SE
845	10	13.7	13	1	ABC30231	Oligonucleotide SE	c 918	9.8	13.4	13	1	ABF40336	Oligonucleotide SE
846	10	13.7	13	1	ABC31894	Oligonucleotide SE	c 919	9.8	13.4	13	1	ABF93486	Oligonucleotide SE
c 847	10	13.7	13	1	ABC31895	Oligonucleotide SE	920	9.8	13.4	13	1	ABF44207	Oligonucleotide SE
c 848	10	13.7	13	1	ABF94203	Oligonucleotide SE	c 921	9.8	13.4	13	1	ABF96258	Oligonucleotide SE
849	10	13.7	13	1	ABF72022	Oligonucleotide SE	922	9.8	13.4	13	1	ABF97570	Oligonucleotide SE
c 850	10	13.7	13	1	ABF72023	Oligonucleotide SE	923	9.8	13.4	13	1	ABF48956	Oligonucleotide SE
851	10	13.7	13	1	ABH23312	Oligonucleotide SE	c 924	9.8	13.4	13	1	ABF48957	Oligonucleotide SE
852	10	13.7	13	1	ABH47962	Oligonucleotide SE	925	9.8	13.4	13	1	ABH28981	Oligonucleotide SE
c 853	10	13.7	13	1	ABC20522	Oligonucleotide SE	c 926	9.8	13.4	13	1	ABF79432	Oligonucleotide SE
c 854	10	13.7	13	1	ABF01977	Oligonucleotide SE	927	9.8	13.4	13	1	ABH10321	Oligonucleotide SE
c 855	10	13.7	13	1	ABF02348	Oligonucleotide SE	c 928	9.8	13.4	13	1	ABF87621	Oligonucleotide SE
856	10	13.7	13	1	ABF09012	Oligonucleotide SE	929	9.8	13.4	13	1	ABH56042	Oligonucleotide SE
c 857	10	13.7	13	1	ABF35912	Oligonucleotide SE	c 930	9.8	13.4	13	1	ABH64185	Oligonucleotide SE
c 858	10	13.7	13	1	ABH18304	Oligonucleotide SE	c 931	9.8	13.4	13	1	ABC96141	Oligonucleotide SE
c 859	10	13.7	13	1	ABF97924	Oligonucleotide SE	932	9.8	13.4	13	1	ABC50444	Oligonucleotide SE
860	10	13.7	13	1	ABH03511	Oligonucleotide SE	c 933	9.8	13.4	13	1	ABF00946	Oligonucleotide SE
861	10	13.7	14	1	AA114798	Triple helix formi	c 934	9.8	13.4	13	1	ABC07556	Oligonucleotide SE
862	10	13.7	14	1	AA114810	Triple helix formi	935	9.8	13.4	13	1	ABF10013	Oligonucleotide SE
c 863	10	13.7	14	1	AAH76180	Region of ALC locu	c 936	9.8	13.4	13	1	ABF68887	Oligonucleotide SE
c 864	10	13.7	14	1	ADE14325	Optineurin promote	c 937	9.8	13.4	13	1	ABF20729	Oligonucleotide SE
865	10	13.7	15	1	AA166764	Mouse CD40 hammerh	c 938	9.8	13.4	13	1	ABF33004	Oligonucleotide SE
866	10	13.7	15	1	AA166763	Mouse CD40 hammerh	c 939	9.8	13.4	13	1	ABF35071	Oligonucleotide SE
867	10	13.7	15	1	AA170480	Modified oligonucle	c 940	9.8	13.4	13	1	ABF35615	Oligonucleotide SE
c 868	10	13.7	15	1	AA170480	Human CHRN2 allele	941	9.8	13.4	13	1	ABF33996	Oligonucleotide SE
869	10	13.7	15	1	AA170480	IGFBP3 oligonucleo	942	9.8	13.4	13	1	ABF48106	Oligonucleotide SE
c 870	10	13.7	15	1	AA170480	IGFBP3 oligonucleo	c 943	9.8	13.4	13	1	ABF81689	Oligonucleotide SE
c 871	10	13.7	15	1	AA170480	IGFBP3 oligonucleo	944	9.8	13.4	13	1	ABF82701	Oligonucleotide SE
872	10	13.7	15	1	AA170480	IGF-I oligonucleot	945	9.8	13.4	13	1	ABH08825	Oligonucleotide SE
873	10	13.7	15	1	AA170480	IGF-I oligonucleot	946	9.8	13.4	13	1	ABH43382	Oligonucleotide SE
c 874	10	13.7	15	1	AA170480	IGFBP3 oligonucleo	947	9.8	13.4	13	1	ABH43392	Oligonucleotide SE
c 875	10	13.7	15	1	AA170480	Human GSR gene a	948	9.8	13.4	13	1	ABH48135	Oligonucleotide SE
c 876	10	13.7	15	1	AA170480	Human GSR allele s	c 949	9.8	13.4	13	1	ABH50324	Oligonucleotide SE
c 877	10	13.7	15	1	AA170480	Human ADMR gene al	950	9.8	13.4	13	1	ABH50325	Oligonucleotide SE
c 878	10	13.7	15	1	AA170480	Human apolipoprote	951	9.8	13.4	13	1	ABH61551	Oligonucleotide SE
c 879	10	13.7	15	1	AA170480	Bacillus thuringie	c 952	9.8	13.4	13	1	ABC44353	Oligonucleotide SE
c 880	9.8	13.4	13	1	AA170480	Purine rich HUM11	c 953	9.8	13.4	13	1	ABC20571	Oligonucleotide SE
c 881	9.8	13.4	13	1	AA170480	Human mitochondria	954	9.8	13.4	13	1	ABC70860	Oligonucleotide SE
882	9.8	13.4	13	1	AA170480	Triple helix third	955	9.8	13.4	13	1	ABC97277	Oligonucleotide SE
883	9.8	13.4	13	1	AA170480	CFTR gene analysis	c 956	9.8	13.4	13	1	ABC25060	Oligonucleotide SE
884	9.8	13.4	13	1	AA170480	Oligonucleotide SE	c 957	9.8	13.4	13	1	ABC25335	Oligonucleotide SE
c 885	9.8	13.4	13	1	AA170480	Oligonucleotide SE	c 958	9.8	13.4	13	1	ABC75662	Oligonucleotide SE
c 886	9.8	13.4	13	1	AA170480	Oligonucleotide SE	959	9.8	13.4	13	1	ABC54452	Oligonucleotide SE
c 887	9.8	13.4	13	1	AA170480	Oligonucleotide SE	c 960	9.8	13.4	13	1	ABF04677	Oligonucleotide SE
c 888	9.8	13.4	13	1	AA170480	Oligonucleotide SE	961	9.8	13.4	13	1	ABF12122	Oligonucleotide SE
c 889	9.8	13.4	13	1	AA170480	Oligonucleotide SE	962	9.8	13.4	13	1	ABF14858	Oligonucleotide SE
c 890	9.8	13.4	13	1	AA170480	Oligonucleotide SE	963	9.8	13.4	13	1	ABF14858	Oligonucleotide SE
c 891	9.8	13.4	13	1	AA170480	Oligonucleotide SE	c 964	9.8	13.4	13	1	ABF27948	Oligonucleotide SE
c 892	9.8	13.4	13	1	AA170480	Oligonucleotide SE	965	9.8	13.4	13	1	ABF29010	Oligonucleotide SE
893	9.8	13.4	13	1	AA170480	Oligonucleotide SE	c 966	9.8	13.4	13	1	ABF31354	Oligonucleotide SE
894	9.8	13.4	13	1	AA170480	Oligonucleotide SE	c 967	9.8	13.4	13	1	ABF39539	Oligonucleotide SE
895	9.8	13.4	13	1	AA170480	Oligonucleotide SE	c 968	9.8	13.4	13	1	ABF44206	Oligonucleotide SE
896	9.8	13.4	13	1	AA170480	Oligonucleotide SE	c 969	9.8	13.4	13	1	ABF97336	Oligonucleotide SE
897	9.8	13.4	13	1	AA170480	Oligonucleotide SE	970	9.8	13.4	13	1	ABF98050	Oligonucleotide SE
c 898	9.8	13.4	13	1	AA170480	Oligonucleotide SE	971	9.8	13.4	13	1	ABF48102	Oligonucleotide SE
c 899	9.8	13.4	13	1	AA170480	Oligonucleotide SE	c 972	9.8	13.4	13	1	ABH23623	Oligonucleotide SE
c 900	9.8	13.4	13	1	AA170480	Oligonucleotide SE	973	9.8	13.4	13	1	ABH28586	Oligonucleotide SE
901	9.8	13.4	13	1	AA170480	Oligonucleotide SE	974	9.8	13.4	13	1	ABF79433	Oligonucleotide SE
902	9.8	13.4	13	1	AA170480	Oligonucleotide SE	c 975	9.8	13.4	13	1	ABH32574	Oligonucleotide SE
c 903	9.8	13.4	13	1	AA170480	Oligonucleotide SE	c 976	9.8	13.4	13	1	ABF57605	Oligonucleotide SE
c 904	9.8	13.4	13	1	AA170480	Oligonucleotide SE	c 977	9.8	13.4	13	1	ABF58738	Oligonucleotide SE
905	9.8	13.4	13	1	AA170480	Oligonucleotide SE	978	9.8	13.4	13	1	ABH35195	Oligonucleotide SE
c 906	9.8	13.4	13	1	AA170480	Oligonucleotide SE	979	9.8	13.4	13	1	ABH35272	Oligonucleotide SE
c 907	9.8	13.4	13	1	AA170480	Oligonucleotide SE	c 980	9.8	13.4	13	1	ABH35273	Oligonucleotide SE
908	9.8	13.4	13	1	AA170480	Oligonucleotide SE	981	9.8	13.4	13	1	ABH11913	Oligonucleotide SE
c 909	9.8	13.4	13	1	AA170480	Oligonucleotide SE	c 982	9.8	13.4	13	1	ABF62876	Oligonucleotide SE

983	13.4	13	1	ABF65506	Oligonucleotide SE	1056	9.8	13.4	13	1	ABF399998	Oligonucleotide SE
984	9.8	13.4	13	ABH49488	Oligonucleotide SE	1057	9.8	13.4	13	1	ABF93487	Oligonucleotide SE
985	9.8	13.4	13	ABH61550	Oligonucleotide SE	1058	9.8	13.4	13	1	ABH21461	Oligonucleotide SE
986	9.8	13.4	13	ABH18721	Oligonucleotide SE	c1059	9.8	13.4	13	1	ABH28587	Oligonucleotide SE
987	9.8	13.4	13	ABH01431	Oligonucleotide SE	1060	9.8	13.4	13	1	ABF81886	Oligonucleotide SE
988	9.8	13.4	13	ABH76532	Oligonucleotide SE	c1061	9.8	13.4	13	1	ABF61608	Oligonucleotide SE
989	9.8	13.4	13	ABH02476	Oligonucleotide SE	1062	9.8	13.4	13	1	ABH37736	Oligonucleotide SE
990	9.8	13.4	13	ABH09420	Oligonucleotide SE	c1063	9.8	13.4	13	1	ABH43993	Oligonucleotide SE
991	9.8	13.4	13	ABH85813	Oligonucleotide SE	1064	9.8	13.4	13	1	ABH46421	Oligonucleotide SE
992	9.8	13.4	13	ABH03521	Oligonucleotide SE	c1065	9.8	13.4	13	1	ABH58472	Oligonucleotide SE
993	9.8	13.4	13	ABH66119	Oligonucleotide SE	1066	9.8	13.4	13	1	ABH18720	Oligonucleotide SE
994	9.8	13.4	13	ABH20843	Oligonucleotide SE	1067	9.8	13.4	13	1	ABH09122	Oligonucleotide SE
995	9.8	13.4	13	ABH35614	Oligonucleotide SE	1068	9.8	13.4	13	1	ABH02478	Oligonucleotide SE
996	9.8	13.4	13	ABH95598	Oligonucleotide SE	1069	9.8	13.4	13	1	ABH08738	Oligonucleotide SE
997	9.8	13.4	13	ABH21460	Oligonucleotide SE	1070	9.8	13.4	13	1	ABH08738	Oligonucleotide SE
998	9.8	13.4	13	ABH49804	Oligonucleotide SE	c1071	9.8	13.4	13	1	ABH59210	Oligonucleotide SE
999	9.8	13.4	13	ABH51815	Oligonucleotide SE	1072	9.8	13.4	13	1	ABH10012	Oligonucleotide SE
1000	9.8	13.4	13	ABH52196	Oligonucleotide SE	c1073	9.8	13.4	13	1	ABH35595	Oligonucleotide SE
1001	9.8	13.4	13	ABH77449	Oligonucleotide SE	1074	9.8	13.4	13	1	ABH363986	Oligonucleotide SE
1002	9.8	13.4	13	ABH78483	Oligonucleotide SE	1075	9.8	13.4	13	1	ABH33698	Oligonucleotide SE
1003	9.8	13.4	13	ABH82700	Oligonucleotide SE	c1076	9.8	13.4	13	1	ABH39999	Oligonucleotide SE
1004	9.8	13.4	13	ABH63798	Oligonucleotide SE	1077	9.8	13.4	13	1	ABH97571	Oligonucleotide SE
1005	9.8	13.4	13	ABH64970	Oligonucleotide SE	1078	9.8	13.4	13	1	ABH99128	Oligonucleotide SE
1006	9.8	13.4	13	ABH56043	Oligonucleotide SE	1079	9.8	13.4	13	1	ABH00288	Oligonucleotide SE
1007	9.8	13.4	13	ABH79543	Oligonucleotide SE	1080	9.8	13.4	13	1	ABH78482	Oligonucleotide SE
1008	9.8	13.4	13	ABH09421	Oligonucleotide SE	1081	9.8	13.4	13	1	ABH7556	Oligonucleotide SE
1009	9.8	13.4	13	ABH09416	Oligonucleotide SE	1082	9.8	13.4	13	1	ABH58739	Oligonucleotide SE
1010	9.8	13.4	13	ABH36697	Oligonucleotide SE	1083	9.8	13.4	13	1	ABH34643	Oligonucleotide SE
1011	9.8	13.4	13	ABH39368	Oligonucleotide SE	1084	9.8	13.4	13	1	ABH14405	Oligonucleotide SE
1012	9.8	13.4	13	ABH64466	Oligonucleotide SE	1085	9.8	13.4	13	1	ABH04676	Oligonucleotide SE
1013	9.8	13.4	13	ABH65244	Oligonucleotide SE	c1086	9.8	13.4	13	1	ABH08304	Oligonucleotide SE
1014	9.8	13.4	13	ABH66551	Oligonucleotide SE	1087	9.8	13.4	13	1	ABH84049	Oligonucleotide SE
1015	9.8	13.4	13	ABH34214	Oligonucleotide SE	c1088	9.8	13.4	13	1	ABH35594	Oligonucleotide SE
1016	9.8	13.4	13	ABH95599	Oligonucleotide SE	1089	9.8	13.4	13	1	ABH14809	Oligonucleotide SE
1017	9.8	13.4	13	ABH21401	Oligonucleotide SE	c1090	9.8	13.4	13	1	ABH40099	Oligonucleotide SE
1018	9.8	13.4	13	ABH52197	Oligonucleotide SE	1091	9.8	13.4	13	1	ABH91401	Oligonucleotide SE
1019	9.8	13.4	13	ABH29804	Oligonucleotide SE	1092	9.8	13.4	13	1	ABH19925	Oligonucleotide SE
1020	9.8	13.4	13	ABH08824	Oligonucleotide SE	c1093	9.8	13.4	13	1	ABH33000	Oligonucleotide SE
1021	9.8	13.4	13	ABH10320	Oligonucleotide SE	1094	9.8	13.4	13	1	ABH34215	Oligonucleotide SE
1022	9.8	13.4	13	ABH15749	Oligonucleotide SE	1095	9.8	13.4	13	1	ABH40195	Oligonucleotide SE
1023	9.8	13.4	13	ABH433383	Oligonucleotide SE	c1096	9.8	13.4	13	1	ABH44005	Oligonucleotide SE
1024	9.8	13.4	13	ABH43549	Oligonucleotide SE	1097	9.8	13.4	13	1	ABH49935	Oligonucleotide SE
1025	9.8	13.4	13	ABH56048	Oligonucleotide SE	1098	9.8	13.4	13	1	ABH51814	Oligonucleotide SE
1026	9.8	13.4	13	ABH17628	Oligonucleotide SE	1099	9.8	13.4	13	1	ABH78386	Oligonucleotide SE
1027	9.8	13.4	13	ABH52233	Oligonucleotide SE	1100	9.8	13.4	13	1	ABH56005	Oligonucleotide SE
1028	9.8	13.4	13	ABH53413	Oligonucleotide SE	1101	9.8	13.4	13	1	ABH57606	Oligonucleotide SE
1029	9.8	13.4	13	ABH66602	Oligonucleotide SE	c1102	9.8	13.4	13	1	ABH10419	Oligonucleotide SE
1030	9.8	13.4	13	ABH06603	Oligonucleotide SE	c1103	9.8	13.4	13	1	ABH11912	Oligonucleotide SE
1031	9.8	13.4	13	ABH07407	Oligonucleotide SE	1104	9.8	13.4	13	1	ABH37512	Oligonucleotide SE
1032	9.8	13.4	13	ABH08305	Oligonucleotide SE	1105	9.8	13.4	13	1	ABH87620	Oligonucleotide SE
1033	9.8	13.4	13	ABH94497	Oligonucleotide SE	1106	9.8	13.4	13	1	ABH17546	Oligonucleotide SE
1034	9.8	13.4	13	ABH333699	Oligonucleotide SE	c1107	9.8	13.4	13	1	ABH17547	Oligonucleotide SE
1035	9.8	13.4	13	ABH33570	Oligonucleotide SE	1108	9.8	13.4	13	1	ABH44352	Oligonucleotide SE
1036	9.8	13.4	13	ABH79616	Oligonucleotide SE	1109	9.8	13.4	13	1	ABH96140	Oligonucleotide SE
1037	9.8	13.4	13	ABH79617	Oligonucleotide SE	c1110	9.8	13.4	13	1	ABH25845	Oligonucleotide SE
1038	9.8	13.4	13	ABH82323	Oligonucleotide SE	c1111	9.8	13.4	13	1	ABH25845	Oligonucleotide SE
1039	9.8	13.4	13	ABH32577	Oligonucleotide SE	1112	9.8	13.4	13	1	ABH00945	Oligonucleotide SE
1040	9.8	13.4	13	ABH34642	Oligonucleotide SE	c1113	9.8	13.4	13	1	ABH02477	Oligonucleotide SE
1041	9.8	13.4	13	ABH10418	Oligonucleotide SE	c1114	9.8	13.4	13	1	ABH22332	Oligonucleotide SE
1042	9.8	13.4	13	ABH11688	Oligonucleotide SE	c1115	9.8	13.4	13	1	ABH07408	Oligonucleotide SE
1043	9.8	13.4	13	ABH11689	Oligonucleotide SE	c1116	9.8	13.4	13	1	ABH65245	Oligonucleotide SE
1044	9.8	13.4	13	ABH97622	Oligonucleotide SE	1117	9.8	13.4	13	1	ABH66886	Oligonucleotide SE
1045	9.8	13.4	13	ABH91290	Oligonucleotide SE	1118	9.8	13.4	13	1	ABH20842	Oligonucleotide SE
1046	9.8	13.4	13	ABH45594	Oligonucleotide SE	c1119	9.8	13.4	13	1	ABH93484	Oligonucleotide SE
1047	9.8	13.4	13	ABH64184	Oligonucleotide SE	1120	9.8	13.4	13	1	ABH93485	Oligonucleotide SE
1048	9.8	13.4	13	ABH59698	Oligonucleotide SE	1121	9.8	13.4	13	1	ABH21755	Oligonucleotide SE
1049	9.8	13.4	13	ABH20174	Oligonucleotide SE	c1122	9.8	13.4	13	1	ABH48107	Oligonucleotide SE
1050	9.8	13.4	13	ABH25844	Oligonucleotide SE	1123	9.8	13.4	13	1	ABH99934	Oligonucleotide SE
1051	9.8	13.4	13	ABH80739	Oligonucleotide SE	c1124	9.8	13.4	13	1	ABH77448	Oligonucleotide SE
1052	9.8	13.4	13	ABH33272	Oligonucleotide SE	c1125	9.8	13.4	13	1	ABH32576	Oligonucleotide SE
1053	9.8	13.4	13	ABH14859	Oligonucleotide SE	c1126	9.8	13.4	13	1	ABH57607	Oligonucleotide SE
1054	9.8	13.4	13	ABH66550	Oligonucleotide SE	c1127	9.8	13.4	13	1	ABH85491	Oligonucleotide SE
1055	9.8	13.4	13	ABH39997	Oligonucleotide SE	c1128	9.8	13.4	13	1	ABH87623	Oligonucleotide SE

1129	9.8	13.4	13	1	ABF63799	Oligonucleotide SE
1130	9.8	13.4	13	1	ABF91912	Oligonucleotide SE
1131	9.8	13.4	13	1	ABF91913	Oligonucleotide SE
1132	9.8	13.4	13	1	ABH42481	Oligonucleotide SE
1133	9.8	13.4	13	1	ABH42676	Oligonucleotide SE
1134	9.8	13.4	13	1	ABH49971	Oligonucleotide SE
1135	9.8	13.4	13	1	ABC17629	Oligonucleotide SE
1136	9.8	13.4	13	1	ABF00944	Oligonucleotide SE
1137	9.8	13.4	13	1	ABC01430	Oligonucleotide SE
1138	9.8	13.4	13	1	ABC02479	Oligonucleotide SE
1139	9.8	13.4	13	1	ABC27658	Oligonucleotide SE
1140	9.8	13.4	13	1	ABC52722	Oligonucleotide SE
1141	9.8	13.4	13	1	ABC79542	Oligonucleotide SE
1142	9.8	13.4	13	1	ABC36696	Oligonucleotide SE
1143	9.8	13.4	13	1	ABC13291	Oligonucleotide SE
1144	9.8	13.4	13	1	ABC39369	Oligonucleotide SE
1145	9.8	13.4	13	1	ABC91479	Oligonucleotide SE
1146	9.8	13.4	13	1	ABF19924	Oligonucleotide SE
1147	9.8	13.4	13	1	ABF20728	Oligonucleotide SE
1148	9.8	13.4	13	1	ABF31355	Oligonucleotide SE
1149	9.8	13.4	13	1	ABF33005	Oligonucleotide SE
1150	9.8	13.4	13	1	ABF35070	Oligonucleotide SE
1151	9.8	13.4	13	1	ABF40194	Oligonucleotide SE
1152	9.8	13.4	13	1	ABF48103	Oligonucleotide SE
1153	9.8	13.4	13	1	ABH00289	Oligonucleotide SE
1154	9.8	13.4	13	1	ABF61609	Oligonucleotide SE
1155	9.8	13.4	13	1	ABH37513	Oligonucleotide SE
1156	9.8	13.4	13	1	ABF62345	Oligonucleotide SE
1157	9.8	13.4	13	1	ABF87618	Oligonucleotide SE
1158	9.8	13.4	13	1	ABF62877	Oligonucleotide SE
1159	9.8	13.4	13	1	ABH42677	Oligonucleotide SE
1160	9.8	13.4	13	1	ABH49489	Oligonucleotide SE
1161	9.8	13.4	13	1	ABH63369	Oligonucleotide SE
1162	9.8	13.4	13	1	ABC73890	Oligonucleotide SE
1163	9.8	13.4	13	1	ABC99123	Oligonucleotide SE
1164	9.8	13.4	13	1	ABC25061	Oligonucleotide SE
1165	9.8	13.4	13	1	ABC49928	Oligonucleotide SE
1166	9.8	13.4	13	1	ABC49929	Oligonucleotide SE
1167	9.8	13.4	13	1	ABC50445	Oligonucleotide SE
1168	9.8	13.4	13	1	ABC07560	Oligonucleotide SE
1169	9.8	13.4	13	1	ABC09417	Oligonucleotide SE
1170	9.8	13.4	13	1	ABC84048	Oligonucleotide SE
1171	9.8	13.4	13	1	ABC85812	Oligonucleotide SE
1172	9.8	13.4	13	1	ABC63520	Oligonucleotide SE
1173	9.8	13.4	13	1	ABC63987	Oligonucleotide SE
1174	9.8	13.4	13	1	ABC64467	Oligonucleotide SE
1175	9.8	13.4	13	1	ABC40098	Oligonucleotide SE
1176	9.8	13.4	13	1	ABF37092	Oligonucleotide SE
1177	9.8	13.4	13	1	ABF40337	Oligonucleotide SE
1178	9.8	13.4	13	1	ABF40340	Oligonucleotide SE
1179	9.8	13.4	13	1	ABF40341	Oligonucleotide SE
1180	9.8	13.4	13	1	ABF69855	Oligonucleotide SE
1181	9.8	13.4	13	1	ABF98051	Oligonucleotide SE
1182	9.8	13.4	13	1	ABF99129	Oligonucleotide SE
1183	9.8	13.4	13	1	ABH28980	Oligonucleotide SE
1184	9.8	13.4	13	1	ABF82322	Oligonucleotide SE
1185	9.8	13.4	13	1	ABF62244	Oligonucleotide SE
1186	9.8	13.4	13	1	ABH43348	Oligonucleotide SE
1187	9.8	13.4	13	1	ABC93199	Oligonucleotide SE
1188	9.8	13.4	13	1	ABC93202	Oligonucleotide SE
1189	9.8	13.4	13	1	ABC93918	Oligonucleotide SE
1190	9.8	13.4	13	1	ABC69699	Oligonucleotide SE
1191	9.8	13.4	13	1	ABC95908	Oligonucleotide SE
1192	9.8	13.4	13	1	ABC97276	Oligonucleotide SE
1193	9.8	13.4	13	1	ABC25334	Oligonucleotide SE
1194	9.8	13.4	13	1	ABC76533	Oligonucleotide SE
1195	9.8	13.4	13	1	ABF06601	Oligonucleotide SE
1196	9.8	13.4	13	1	ABC31866	Oligonucleotide SE
1197	9.8	13.4	13	1	ABC07409	Oligonucleotide SE
1198	9.8	13.4	13	1	ABC84496	Oligonucleotide SE
1199	9.8	13.4	13	1	ABC84499	Oligonucleotide SE
1200	9.8	13.4	13	1	ABC11014	Oligonucleotide SE
1201	9.8	13.4	13	1	ABC38991	Oligonucleotide SE

1202	9.8	13.4	13	1	ABC39733	Oligonucleotide SE
1203	9.8	13.4	13	1	ABF69854	Oligonucleotide SE
1204	9.8	13.4	13	1	ABF62879	Oligonucleotide SE
1205	9.8	13.4	13	1	ABF64971	Oligonucleotide SE
1206	9.8	13.4	13	1	ABH15748	Oligonucleotide SE
1207	9.8	13.4	13	1	ABF67028	Oligonucleotide SE
1208	9.8	13.4	13	1	ABF67029	Oligonucleotide SE
1209	9.8	13.4	13	1	ABH46420	Oligonucleotide SE
1210	9.8	13.4	13	1	ABH46789	Oligonucleotide SE
1211	9.8	13.4	13	1	ABC93198	Oligonucleotide SE
1212	9.8	13.4	13	1	ABC19416	Oligonucleotide SE
1213	9.8	13.4	13	1	ABC20175	Oligonucleotide SE
1214	9.8	13.4	13	1	ABC70861	Oligonucleotide SE
1215	9.8	13.4	13	1	ABC73532	Oligonucleotide SE
1216	9.8	13.4	13	1	ABC73533	Oligonucleotide SE
1217	9.8	13.4	13	1	ABC73891	Oligonucleotide SE
1218	9.8	13.4	13	1	ABF00942	Oligonucleotide SE
1219	9.8	13.4	13	1	ABF00943	Oligonucleotide SE
1220	9.8	13.4	13	1	ABC54453	Oligonucleotide SE
1221	9.8	13.4	13	1	ABC31867	Oligonucleotide SE
1222	9.8	13.4	13	1	ABC07557	Oligonucleotide SE
1223	9.8	13.4	13	1	ABC59211	Oligonucleotide SE
1224	9.8	13.4	13	1	ABC12390	Oligonucleotide SE
1225	9.8	13.4	13	1	ABF27949	Oligonucleotide SE
1226	9.8	13.4	13	1	ABF39538	Oligonucleotide SE
1227	9.8	13.4	13	1	ABF96259	Oligonucleotide SE
1228	9.8	13.4	13	1	ABH21400	Oligonucleotide SE
1229	9.8	13.4	13	1	ABH25678	Oligonucleotide SE
1230	9.8	13.4	13	1	ABF78387	Oligonucleotide SE
1231	9.8	13.4	13	1	ABF81688	Oligonucleotide SE
1232	9.8	13.4	13	1	ABF81887	Oligonucleotide SE
1233	9.8	13.4	13	1	ABF57604	Oligonucleotide SE
1234	9.8	13.4	13	1	ABH35194	Oligonucleotide SE
1235	9.8	13.4	13	1	ABF85490	Oligonucleotide SE
1236	9.8	13.4	13	1	ABF61761	Oligonucleotide SE
1237	9.8	13.4	13	1	ABF62878	Oligonucleotide SE
1238	9.8	13.4	13	1	ABF91291	Oligonucleotide SE
1239	9.8	13.4	13	1	ABH42480	Oligonucleotide SE
1240	9.8	13.4	13	1	ABH43380	Oligonucleotide SE
1241	9.8	13.4	13	1	ABH63368	Oligonucleotide SE
1242	9.8	13.4	13	1	ABC95909	Oligonucleotide SE
1243	9.8	13.4	13	1	ABC53412	Oligonucleotide SE
1244	9.8	13.4	13	1	ABF06600	Oligonucleotide SE
1245	9.8	13.4	13	1	ABC32799	Oligonucleotide SE
1246	9.8	13.4	13	1	ABC11015	Oligonucleotide SE
1247	9.8	13.4	13	1	ABC85460	Oligonucleotide SE
1248	9.8	13.4	13	1	ABC38990	Oligonucleotide SE
1249	9.8	13.4	13	1	ABF15150	Oligonucleotide SE
1250	9.8	13.4	13	1	ABF15151	Oligonucleotide SE
1251	9.8	13.4	13	1	ABF29011	Oligonucleotide SE
1252	9.8	13.4	13	1	ABF33001	Oligonucleotide SE
1253	9.8	13.4	13	1	ABF37093	Oligonucleotide SE
1254	9.8	13.4	13	1	ABH21754	Oligonucleotide SE
1255	9.8	13.4	13	1	ABF53571	Oligonucleotide SE
1256	9.8	13.4	13	1	ABH29805	Oligonucleotide SE
1257	9.8	13.4	13	1	ABH07557	Oligonucleotide SE
1258	9.8	13.4	13	1	ABH12090	Oligonucleotide SE
1259	9.8	13.4	13	1	ABH37737	Oligonucleotide SE
1260	9.8	13.4	13	1	ABF87619	Oligonucleotide SE
1261	9.8	13.4	13	1	ABF65507	Oligonucleotide SE
1262	9.8	13.4	13	1	ABH43381	Oligonucleotide SE
1263	9.8	13.4	13	1	ABH46788	Oligonucleotide SE
1264	9.8	13.4	13	1	ABH48134	Oligonucleotide SE
1265	9.8	13.4	13	1	ABH56629	Oligonucleotide SE
1266	9.8	13.4	13	1	ABH58473	Oligonucleotide SE
1267	9.8	13.4	13	1	ABH66305	Oligonucleotide SE
1268	9.8	13.4	13	1	ABZ22350	Green fluorescent
1269	9.8	13.4	13	1	ACD56505	HBV enzymatic nucl
1270	9.8	13.4	14	1	AAQ78380	Antisense oligonuc
1271	9.8	13.4	14	1	AAQ78380	HIV-1 proviral DNA
1272	9.8	13.4	14	1	AAAT5923	Human IL5 receptor
1273	9.8	13.4	14	1	AAV49162	rb gene antisense
1274	9.8	13.4	14	1	AAV54026	Human IL-5 recepto

c1421	9.4	12.9	12	1	ABI40252	Oligonucleotide pr	c1494	9.4	12.9	12	1	ABI04050	Oligonucleotide pr
c1422	9.4	12.9	12	1	ABH91147	Oligonucleotide pr	1495	9.4	12.9	12	1	ABI30567	Oligonucleotide pr
c1423	9.4	12.9	12	1	ABI45362	Oligonucleotide pr	1496	9.4	12.9	12	1	ABI30568	Oligonucleotide pr
c1424	9.4	12.9	12	1	ABI46192	Oligonucleotide pr	c1497	9.4	12.9	12	1	ABI38402	Oligonucleotide pr
c1425	9.4	12.9	12	1	ABI48656	Oligonucleotide pr	c1498	9.4	12.9	12	1	ABI41696	Oligonucleotide pr
c1426	9.4	12.9	12	1	ABI57722	Oligonucleotide pr	c1499	9.4	12.9	12	1	ABI41699	Oligonucleotide pr
c1427	9.4	12.9	12	1	ABI73066	Oligonucleotide pr	1500	9.4	12.9	12	1	ABI45536	Oligonucleotide pr
c1428	9.4	12.9	12	1	ABI77084	Oligonucleotide pr	c1501	9.4	12.9	12	1	ABI46834	Oligonucleotide pr
c1429	9.4	12.9	12	1	ABI79825	Oligonucleotide pr	c1502	9.4	12.9	12	1	ABI47185	Oligonucleotide pr
c1430	9.4	12.9	12	1	ABI66746	Oligonucleotide pr	1503	9.4	12.9	12	1	ABI51977	Oligonucleotide pr
c1431	9.4	12.9	12	1	ABH67362	Oligonucleotide pr	c1504	9.4	12.9	12	1	ABI55659	Oligonucleotide pr
c1432	9.4	12.9	12	1	ABI17924	Oligonucleotide pr	1505	9.4	12.9	12	1	ABI72657	Oligonucleotide pr
c1433	9.4	12.9	12	1	ABH68844	Oligonucleotide pr	1506	9.4	12.9	12	1	ABI62432	Oligonucleotide pr
c1434	9.4	12.9	12	1	ABI119399	Oligonucleotide pr	1507	9.4	12.9	12	1	ABI80840	Oligonucleotide pr
c1435	9.4	12.9	12	1	ABH712228	Oligonucleotide pr	c1508	9.4	12.9	12	1	ABI19281	Oligonucleotide pr
c1436	9.4	12.9	12	1	ABI22293	Oligonucleotide pr	1509	9.4	12.9	12	1	ABH69898	Oligonucleotide pr
c1437	9.4	12.9	12	1	ABH73304	Oligonucleotide pr	c1510	9.4	12.9	12	1	ABH70493	Oligonucleotide pr
c1438	9.4	12.9	12	1	ABI27146	Oligonucleotide pr	c1511	9.4	12.9	12	1	ABH7942	Oligonucleotide pr
c1439	9.4	12.9	12	1	ABH77214	Oligonucleotide pr	1512	9.4	12.9	12	1	ABI25320	Oligonucleotide pr
c1440	9.4	12.9	12	1	ABI03017	Oligonucleotide pr	1513	9.4	12.9	12	1	ABH77215	Oligonucleotide pr
c1441	9.4	12.9	12	1	ABI04185	Oligonucleotide pr	1514	9.4	12.9	12	1	ABH79768	Oligonucleotide pr
c1442	9.4	12.9	12	1	ABH80463	Oligonucleotide pr	c1515	9.4	12.9	12	1	ABI08483	Oligonucleotide pr
c1443	9.4	12.9	12	1	ABI37376	Oligonucleotide pr	1516	9.4	12.9	12	1	ABI08694	Oligonucleotide pr
c1444	9.4	12.9	12	1	ABH92032	Oligonucleotide pr	c1517	9.4	12.9	12	1	ABI14468	Oligonucleotide pr
c1445	9.4	12.9	12	1	ABI46663	Oligonucleotide pr	1518	9.4	12.9	12	1	ABI14588	Oligonucleotide pr
c1446	9.4	12.9	12	1	ABH52878	Oligonucleotide pr	c1519	9.4	12.9	12	1	ABI41018	Oligonucleotide pr
c1447	9.4	12.9	12	1	ABH59184	Oligonucleotide pr	c1520	9.4	12.9	12	1	ABI56068	Oligonucleotide pr
c1448	9.4	12.9	12	1	ABH79909	Oligonucleotide pr	c1521	9.4	12.9	12	1	ABI61150	Oligonucleotide pr
c1449	9.4	12.9	12	1	ABH70386	Oligonucleotide pr	1522	9.4	12.9	12	1	ABI62769	Oligonucleotide pr
c1450	9.4	12.9	12	1	ABH95714	Oligonucleotide pr	c1523	9.4	12.9	12	1	ABI77472	Oligonucleotide pr
c1451	9.4	12.9	12	1	ABH71841	Oligonucleotide pr	1524	9.4	12.9	12	1	ABI79595	Oligonucleotide pr
c1452	9.4	12.9	12	1	ABI25318	Oligonucleotide pr	1525	9.4	12.9	12	1	ABH68022	Oligonucleotide pr
c1453	9.4	12.9	12	1	ABH79108	Oligonucleotide pr	1526	9.4	12.9	12	1	ABH98228	Oligonucleotide pr
c1454	9.4	12.9	12	1	ABI04506	Oligonucleotide pr	c1527	9.4	12.9	12	1	ABI25355	Oligonucleotide pr
c1455	9.4	12.9	12	1	ABH80641	Oligonucleotide pr	c1528	9.4	12.9	12	1	ABH75498	Oligonucleotide pr
c1456	9.4	12.9	12	1	ABI31092	Oligonucleotide pr	c1529	9.4	12.9	12	1	ABI01219	Oligonucleotide pr
c1457	9.4	12.9	12	1	ABI32122	Oligonucleotide pr	1530	9.4	12.9	12	1	ABH77115	Oligonucleotide pr
c1458	9.4	12.9	12	1	ABH82350	Oligonucleotide pr	c1531	9.4	12.9	12	1	ABH78200	Oligonucleotide pr
c1459	9.4	12.9	12	1	ABI32640	Oligonucleotide pr	1532	9.4	12.9	12	1	ABI23336	Oligonucleotide pr
c1460	9.4	12.9	12	1	ABH88114	Oligonucleotide pr	c1533	9.4	12.9	12	1	ABI33911	Oligonucleotide pr
c1461	9.4	12.9	12	1	ABI40821	Oligonucleotide pr	c1534	9.4	12.9	12	1	ABH85108	Oligonucleotide pr
c1462	9.4	12.9	12	1	ABI16326	Oligonucleotide pr	1535	9.4	12.9	12	1	ABH85958	Oligonucleotide pr
c1463	9.4	12.9	12	1	ABH91873	Oligonucleotide pr	c1536	9.4	12.9	12	1	ABI11522	Oligonucleotide pr
c1464	9.4	12.9	12	1	ABI46955	Oligonucleotide pr	c1537	9.4	12.9	12	1	ABH87880	Oligonucleotide pr
c1465	9.4	12.9	12	1	ABI47671	Oligonucleotide pr	c1538	9.4	12.9	12	1	ABH86006	Oligonucleotide pr
c1466	9.4	12.9	12	1	ABI468193	Oligonucleotide pr	1539	9.4	12.9	12	1	ABI15780	Oligonucleotide pr
c1467	9.4	12.9	12	1	ABI67900	Oligonucleotide pr	1540	9.4	12.9	12	1	ABI43563	Oligonucleotide pr
c1468	9.4	12.9	12	1	ABI70864	Oligonucleotide pr	c1541	9.4	12.9	12	1	ABI45739	Oligonucleotide pr
c1469	9.4	12.9	12	1	ABI72518	Oligonucleotide pr	1542	9.4	12.9	12	1	ABI57673	Oligonucleotide pr
c1470	9.4	12.9	12	1	ABI73257	Oligonucleotide pr	c1543	9.4	12.9	12	1	ABI59468	Oligonucleotide pr
c1471	9.4	12.9	12	1	ABI60061	Oligonucleotide pr	1544	9.4	12.9	12	1	ABI73755	Oligonucleotide pr
c1472	9.4	12.9	12	1	ABI62203	Oligonucleotide pr	c1545	9.4	12.9	12	1	ABI62098	Oligonucleotide pr
c1473	9.4	12.9	12	1	ABI17646	Oligonucleotide pr	1546	9.4	12.9	12	1	ABI79599	Oligonucleotide pr
c1474	9.4	12.9	12	1	ABH68309	Oligonucleotide pr	c1547	9.4	12.9	12	1	ABH95268	Oligonucleotide pr
c1475	9.4	12.9	12	1	ABI18658	Oligonucleotide pr	1548	9.4	12.9	12	1	ABH77356	Oligonucleotide pr
c1476	9.4	12.9	12	1	ABH94784	Oligonucleotide pr	c1549	9.4	12.9	12	1	ABI05646	Oligonucleotide pr
c1477	9.4	12.9	12	1	ABH75495	Oligonucleotide pr	c1550	9.4	12.9	12	1	ABI05712	Oligonucleotide pr
c1478	9.4	12.9	12	1	ABH76118	Oligonucleotide pr	1551	9.4	12.9	12	1	ABI33186	Oligonucleotide pr
c1479	9.4	12.9	12	1	ABI03618	Oligonucleotide pr	c1552	9.4	12.9	12	1	ABI09449	Oligonucleotide pr
c1480	9.4	12.9	12	1	ABI05670	Oligonucleotide pr	1553	9.4	12.9	12	1	ABH85370	Oligonucleotide pr
c1481	9.4	12.9	12	1	ABI31802	Oligonucleotide pr	c1554	9.4	12.9	12	1	ABI10492	Oligonucleotide pr
c1482	9.4	12.9	12	1	ABI32465	Oligonucleotide pr	1555	9.4	12.9	12	1	ABI11455	Oligonucleotide pr
c1483	9.4	12.9	12	1	ABH83378	Oligonucleotide pr	c1556	9.4	12.9	12	1	ABH88274	Oligonucleotide pr
c1484	9.4	12.9	12	1	ABH84893	Oligonucleotide pr	1557	9.4	12.9	12	1	ABI13515	Oligonucleotide pr
c1485	9.4	12.9	12	1	ABH85174	Oligonucleotide pr	1558	9.4	12.9	12	1	ABI16205	Oligonucleotide pr
c1486	9.4	12.9	12	1	ABH89530	Oligonucleotide pr	c1559	9.4	12.9	12	1	ABI44606	Oligonucleotide pr
c1487	9.4	12.9	12	1	ABI76716	Oligonucleotide pr	1560	9.4	12.9	12	1	ABI50901	Oligonucleotide pr
c1488	9.4	12.9	12	1	ABI65404	Oligonucleotide pr	c1561	9.4	12.9	12	1	ABI52089	Oligonucleotide pr
c1489	9.4	12.9	12	1	ABI80239	Oligonucleotide pr	1562	9.4	12.9	12	1	ABI56543	Oligonucleotide pr
c1490	9.4	12.9	12	1	ABI67147	Oligonucleotide pr	1563	9.4	12.9	12	1	ABI80978	Oligonucleotide pr
c1491	9.4	12.9	12	1	ABH70884	Oligonucleotide pr	1564	9.4	12.9	12	1	ABI81986	Oligonucleotide pr
c1492	9.4	12.9	12	1	ABI23105	Oligonucleotide pr	1565	9.4	12.9	12	1	ABH68546	Oligonucleotide pr
c1493	9.4	12.9	12	1	ABI01560	Oligonucleotide pr	c1566	9.4	12.9	12	1	ABH72306	Oligonucleotide pr

1567	9.4	12.9	1	ABH98632	Oligonucleotide pr	ci640	9.4	12.9	12	1	ABI33589	Oligonucleotide pr
1568	9.4	12.9	1	ABI29439	Oligonucleotide pr	ci641	9.4	12.9	12	1	ABI11718	Oligonucleotide pr
1569	9.4	12.9	1	ABI35162	Oligonucleotide pr	ci642	9.4	12.9	12	1	ABI38333	Oligonucleotide pr
1570	9.4	12.9	1	ABI42659	Oligonucleotide pr	ci643	9.4	12.9	12	1	ABI16656	Oligonucleotide pr
1571	9.4	12.9	1	ABI44936	Oligonucleotide pr	ci644	9.4	12.9	12	1	ABI48116	Oligonucleotide pr
1572	9.4	12.9	1	ABI53378	Oligonucleotide pr	ci645	9.4	12.9	12	1	ABI67335	Oligonucleotide pr
1573	9.4	12.9	1	ABI60672	Oligonucleotide pr	ci646	9.4	12.9	12	1	ABI70220	Oligonucleotide pr
1574	9.4	12.9	1	ABI75354	Oligonucleotide pr	ci647	9.4	12.9	12	1	ABI58755	Oligonucleotide pr
1575	9.4	12.9	1	ABI65524	Oligonucleotide pr	ci648	9.4	12.9	12	1	ABI75442	Oligonucleotide pr
1576	9.4	12.9	1	ABH92716	Oligonucleotide pr	ci649	9.4	12.9	12	1	ABI20880	Oligonucleotide pr
1577	9.4	12.9	1	ABH92716	Oligonucleotide pr	ci650	9.4	12.9	12	1	ABI26065	Oligonucleotide pr
1578	9.4	12.9	1	ABH69570	Oligonucleotide pr	ci651	9.4	12.9	12	1	ABH72938	Oligonucleotide pr
1579	9.4	12.9	1	ABH75419	Oligonucleotide pr	ci652	9.4	12.9	12	1	ABH80035	Oligonucleotide pr
1580	9.4	12.9	1	ABH7484	Oligonucleotide pr	ci653	9.4	12.9	12	1	ABI07190	Oligonucleotide pr
1581	9.4	12.9	1	ABI04806	Oligonucleotide pr	ci654	9.4	12.9	12	1	ABH82598	Oligonucleotide pr
1582	9.4	12.9	1	ABI30458	Oligonucleotide pr	ci655	9.4	12.9	12	1	ABH84297	Oligonucleotide pr
1583	9.4	12.9	1	ABH81369	Oligonucleotide pr	ci656	9.4	12.9	12	1	ABI68617	Oligonucleotide pr
1584	9.4	12.9	1	ABI07319	Oligonucleotide pr	ci657	9.4	12.9	12	1	ABI57840	Oligonucleotide pr
1585	9.4	12.9	1	ABI33794	Oligonucleotide pr	ci658	9.4	12.9	12	1	ABI77565	Oligonucleotide pr
1586	9.4	12.9	1	ABH84208	Oligonucleotide pr	ci659	9.4	12.9	12	1	ABI79088	Oligonucleotide pr
1587	9.4	12.9	1	ABI09480	Oligonucleotide pr	ci660	9.4	12.9	12	1	ABI20744	Oligonucleotide pr
1588	9.4	12.9	1	ABI37508	Oligonucleotide pr	ci661	9.4	12.9	12	1	ABH74432	Oligonucleotide pr
1589	9.4	12.9	1	ABH89344	Oligonucleotide pr	ci662	9.4	12.9	12	1	ABI29644	Oligonucleotide pr
1590	9.4	12.9	1	ABI47896	Oligonucleotide pr	ci663	9.4	12.9	12	1	ABI31489	Oligonucleotide pr
1591	9.4	12.9	1	ABI58941	Oligonucleotide pr	ci664	9.4	12.9	12	1	ABI08780	Oligonucleotide pr
1592	9.4	12.9	1	ABI74012	Oligonucleotide pr	ci665	9.4	12.9	12	1	ABH84725	Oligonucleotide pr
1593	9.4	12.9	1	ABI75688	Oligonucleotide pr	ci666	9.4	12.9	12	1	ABI34822	Oligonucleotide pr
1594	9.4	12.9	1	ABI62534	Oligonucleotide pr	ci667	9.4	12.9	12	1	ABI11594	Oligonucleotide pr
1595	9.4	12.9	1	ABI77570	Oligonucleotide pr	ci668	9.4	12.9	12	1	ABH12283	Oligonucleotide pr
1596	9.4	12.9	1	ABI64574	Oligonucleotide pr	ci669	9.4	12.9	12	1	ABH89942	Oligonucleotide pr
1597	9.4	12.9	1	ABI18132	Oligonucleotide pr	ci670	9.4	12.9	12	1	ABH90326	Oligonucleotide pr
1598	9.4	12.9	1	ABI18634	Oligonucleotide pr	ci671	9.4	12.9	12	1	ABI45021	Oligonucleotide pr
1599	9.4	12.9	1	ABH68690	Oligonucleotide pr	ci672	9.4	12.9	12	1	ABI48099	Oligonucleotide pr
1600	9.4	12.9	1	ABI18684	Oligonucleotide pr	ci673	9.4	12.9	12	1	ABI48703	Oligonucleotide pr
1601	9.4	12.9	1	ABI19115	Oligonucleotide pr	ci674	9.4	12.9	12	1	ABI58212	Oligonucleotide pr
1602	9.4	12.9	1	ABH69645	Oligonucleotide pr	ci675	9.4	12.9	12	1	ABI74928	Oligonucleotide pr
1603	9.4	12.9	1	ABH77233	Oligonucleotide pr	ci676	9.4	12.9	12	1	ABI61706	Oligonucleotide pr
1604	9.4	12.9	1	ABI33399	Oligonucleotide pr	ci677	9.4	12.9	12	1	ABH92783	Oligonucleotide pr
1605	9.4	12.9	1	ABH84721	Oligonucleotide pr	ci678	9.4	12.9	12	1	ABH67832	Oligonucleotide pr
1606	9.4	12.9	1	ABI12047	Oligonucleotide pr	ci679	9.4	12.9	12	1	ABH93422	Oligonucleotide pr
1607	9.4	12.9	1	ABH87714	Oligonucleotide pr	ci680	9.4	12.9	12	1	ABI121368	Oligonucleotide pr
1608	9.4	12.9	1	ABH87998	Oligonucleotide pr	ci681	9.4	12.9	12	1	ABH72328	Oligonucleotide pr
1609	9.4	12.9	1	ABI38524	Oligonucleotide pr	ci682	9.4	12.9	12	1	ABH80677	Oligonucleotide pr
1610	9.4	12.9	1	ABH88715	Oligonucleotide pr	ci683	9.4	12.9	12	1	ABH06346	Oligonucleotide pr
1611	9.4	12.9	1	ABI14005	Oligonucleotide pr	ci684	9.4	12.9	12	1	ABI06717	Oligonucleotide pr
1612	9.4	12.9	1	ABI42987	Oligonucleotide pr	ci685	9.4	12.9	12	1	ABI06893	Oligonucleotide pr
1613	9.4	12.9	1	ABI52776	Oligonucleotide pr	ci686	9.4	12.9	12	1	ABI36866	Oligonucleotide pr
1614	9.4	12.9	1	ABI56583	Oligonucleotide pr	ci687	9.4	12.9	12	1	ABI15225	Oligonucleotide pr
1615	9.4	12.9	1	ABI71653	Oligonucleotide pr	ci688	9.4	12.9	12	1	ABH91642	Oligonucleotide pr
1616	9.4	12.9	1	ABI72642	Oligonucleotide pr	ci689	9.4	12.9	12	1	ABI43225	Oligonucleotide pr
1617	9.4	12.9	1	ABI60565	Oligonucleotide pr	ci690	9.4	12.9	12	1	ABI53189	Oligonucleotide pr
1618	9.4	12.9	1	ABH67611	Oligonucleotide pr	ci691	9.4	12.9	12	1	ABI56672	Oligonucleotide pr
1619	9.4	12.9	1	ABH67642	Oligonucleotide pr	ci692	9.4	12.9	12	1	ABI59730	Oligonucleotide pr
1620	9.4	12.9	1	ABH68426	Oligonucleotide pr	ci693	9.4	12.9	12	1	ABI77595	Oligonucleotide pr
1621	9.4	12.9	1	ABH74828	Oligonucleotide pr	ci694	9.4	12.9	13	1	AAV03420	Enhanced specific
1622	9.4	12.9	1	ABI06718	Oligonucleotide pr	ci695	9.4	12.9	13	1	AAV03420	Enhanced specific
1623	9.4	12.9	1	ABI36232	Oligonucleotide pr	ci696	9.4	12.9	13	1	AAV40929	Primer AL1:417L13
1624	9.4	12.9	1	ABI37912	Oligonucleotide pr	ci697	9.4	12.9	13	1	AAV26795	Human INFRSFL1B ge
1625	9.4	12.9	1	ABI39499	Oligonucleotide pr	ci698	9.4	12.9	13	1	AAV70056	Oligonucleotide SE
1626	9.4	12.9	1	ABH90292	Oligonucleotide pr	ci699	9.4	12.9	13	1	ABC46269	Oligonucleotide SE
1627	9.4	12.9	1	ABI16306	Oligonucleotide pr	ci700	9.4	12.9	13	1	ABC21592	Oligonucleotide SE
1628	9.4	12.9	1	ABI42572	Oligonucleotide pr	ci701	9.4	12.9	13	1	ABC23945	Oligonucleotide SE
1629	9.4	12.9	1	ABI42572	Oligonucleotide pr	ci702	9.4	12.9	13	1	ABC49345	Oligonucleotide SE
1630	9.4	12.9	1	ABI44042	Oligonucleotide pr	ci703	9.4	12.9	13	1	ABC51037	Oligonucleotide SE
1631	9.4	12.9	1	ABI44709	Oligonucleotide pr	ci704	9.4	12.9	13	1	ABC51407	Oligonucleotide SE
1632	9.4	12.9	1	ABI51293	Oligonucleotide pr	ci705	9.4	12.9	13	1	ABC02846	Oligonucleotide SE
1633	9.4	12.9	1	ABI69673	Oligonucleotide pr	ci706	9.4	12.9	13	1	ABF03835	Oligonucleotide SE
1634	9.4	12.9	1	ABI17791	Oligonucleotide pr	ci707	9.4	12.9	13	1	ABC54442	Oligonucleotide SE
1635	9.4	12.9	1	ABH20824	Oligonucleotide pr	ci708	9.4	12.9	13	1	ABC54910	Oligonucleotide SE
1636	9.4	12.9	1	ABH72500	Oligonucleotide pr	ci709	9.4	12.9	13	1	ABC05708	Oligonucleotide SE
1637	9.4	12.9	1	ABI22516	Oligonucleotide pr	ci710	9.4	12.9	13	1	ABC34459	Oligonucleotide SE
1638	9.4	12.9	1	ABH76419	Oligonucleotide pr	ci711	9.4	12.9	13	1	ABF09662	Oligonucleotide SE
1639	9.4	12.9	1	ABI26786	Oligonucleotide pr	ci712	9.4	12.9	13	1	ABC64622	Oligonucleotide SE

c1713	9.4	12.9	13	1	ABC16200	Oligonucleotide SE	1786	9.4	12.9	13	1	ABH41757	Oligonucleotide SE
c1714	9.4	12.9	13	1	ASC41057	Oligonucleotide SE	1787	9.4	12.9	13	1	ABH42159	Oligonucleotide SE
c1715	9.4	12.9	13	1	ABF19575	Oligonucleotide SE	c1788	9.4	12.9	13	1	ABH45110	Oligonucleotide SE
c1716	9.4	12.9	13	1	ABF26455	Oligonucleotide SE	1789	9.4	12.9	13	1	ABH53898	Oligonucleotide SE
c1717	9.4	12.9	13	1	ABF28734	Oligonucleotide SE	1790	9.4	12.9	13	1	ABH57300	Oligonucleotide SE
c1718	9.4	12.9	13	1	ABF32543	Oligonucleotide SE	1791	9.4	12.9	13	1	ABH57690	Oligonucleotide SE
c1719	9.4	12.9	13	1	ABF42384	Oligonucleotide SE	c1792	9.4	12.9	13	1	ABH61584	Oligonucleotide SE
c1720	9.4	12.9	13	1	ABF73552	Oligonucleotide SE	1793	9.4	12.9	13	1	ABH45647	Oligonucleotide SE
c1721	9.4	12.9	13	1	ABF49162	Oligonucleotide SE	1794	9.4	12.9	13	1	ABC49648	Oligonucleotide SE
c1722	9.4	12.9	13	1	ABH25102	Oligonucleotide SE	c1795	9.4	12.9	13	1	ABC50397	Oligonucleotide SE
c1723	9.4	12.9	13	1	ABH00156	Oligonucleotide SE	c1796	9.4	12.9	13	1	ABC50401	Oligonucleotide SE
c1724	9.4	12.9	13	1	ABF75595	Oligonucleotide SE	1797	9.4	12.9	13	1	ABC76318	Oligonucleotide SE
c1725	9.4	12.9	13	1	ABH26156	Oligonucleotide SE	c1798	9.4	12.9	13	1	ABC02863	Oligonucleotide SE
c1726	9.4	12.9	13	1	ABH03114	Oligonucleotide SE	1799	9.4	12.9	13	1	ABC27565	Oligonucleotide SE
c1727	9.4	12.9	13	1	ABF53196	Oligonucleotide SE	c1800	9.4	12.9	13	1	ABC52857	Oligonucleotide SE
c1728	9.4	12.9	13	1	ABH03395	Oligonucleotide SE	c1801	9.4	12.9	13	1	ABC54129	Oligonucleotide SE
c1729	9.4	12.9	13	1	ABH29651	Oligonucleotide SE	c1802	9.4	12.9	13	1	ABC54443	Oligonucleotide SE
c1730	9.4	12.9	13	1	ABH06002	Oligonucleotide SE	1803	9.4	12.9	13	1	ABC31426	Oligonucleotide SE
c1731	9.4	12.9	13	1	ABF82589	Oligonucleotide SE	1804	9.4	12.9	13	1	ABC11856	Oligonucleotide SE
c1732	9.4	12.9	13	1	ABH32905	Oligonucleotide SE	c1805	9.4	12.9	13	1	ABC88314	Oligonucleotide SE
c1733	9.4	12.9	13	1	ABH08559	Oligonucleotide SE	1806	9.4	12.9	13	1	ABF13770	Oligonucleotide SE
c1734	9.4	12.9	13	1	ABF84804	Oligonucleotide SE	1807	9.4	12.9	13	1	ABC63663	Oligonucleotide SE
c1735	9.4	12.9	13	1	ABF84805	Oligonucleotide SE	1808	9.4	12.9	13	1	ABC39010	Oligonucleotide SE
c1736	9.4	12.9	13	1	ABH13466	Oligonucleotide SE	c1809	9.4	12.9	13	1	ABC64528	Oligonucleotide SE
c1737	9.4	12.9	13	1	ABF63725	Oligonucleotide SE	1810	9.4	12.9	13	1	ABC64529	Oligonucleotide SE
c1738	9.4	12.9	13	1	ABH14806	Oligonucleotide SE	1811	9.4	12.9	13	1	ABC39899	Oligonucleotide SE
c1739	9.4	12.9	13	1	ABH41252	Oligonucleotide SE	c1812	9.4	12.9	13	1	ABC16199	Oligonucleotide SE
c1740	9.4	12.9	13	1	ABH53760	Oligonucleotide SE	1813	9.4	12.9	13	1	ABF15750	Oligonucleotide SE
c1741	9.4	12.9	13	1	ABH58823	Oligonucleotide SE	c1814	9.4	12.9	13	1	ABF22104	Oligonucleotide SE
c1742	9.4	12.9	13	1	ABH59590	Oligonucleotide SE	1815	9.4	12.9	13	1	ABF23068	Oligonucleotide SE
c1743	9.4	12.9	13	1	ABH59591	Oligonucleotide SE	c1816	9.4	12.9	13	1	ABF28323	Oligonucleotide SE
c1744	9.4	12.9	13	1	ABH62571	Oligonucleotide SE	c1817	9.4	12.9	13	1	ABF43155	Oligonucleotide SE
c1745	9.4	12.9	13	1	ABC68001	Oligonucleotide SE	1818	9.4	12.9	13	1	ABF44657	Oligonucleotide SE
c1746	9.4	12.9	13	1	ABC93472	Oligonucleotide SE	c1819	9.4	12.9	13	1	ABH21912	Oligonucleotide SE
c1747	9.4	12.9	13	1	ABC94697	Oligonucleotide SE	c1820	9.4	12.9	13	1	ABF71905	Oligonucleotide SE
c1748	9.4	12.9	13	1	ABF15595	Oligonucleotide SE	1821	9.4	12.9	13	1	ABH25152	Oligonucleotide SE
c1749	9.4	12.9	13	1	ABC21785	Oligonucleotide SE	c1822	9.4	12.9	13	1	ABH05017	Oligonucleotide SE
c1750	9.4	12.9	13	1	ABC98917	Oligonucleotide SE	1823	9.4	12.9	13	1	ABF80830	Oligonucleotide SE
c1751	9.4	12.9	13	1	ABC24679	Oligonucleotide SE	c1824	9.4	12.9	13	1	ABH32904	Oligonucleotide SE
c1752	9.4	12.9	13	1	ABC50399	Oligonucleotide SE	1825	9.4	12.9	13	1	ABH08287	Oligonucleotide SE
c1753	9.4	12.9	13	1	ABC28260	Oligonucleotide SE	1826	9.4	12.9	13	1	ABF85804	Oligonucleotide SE
c1754	9.4	12.9	13	1	ABC28610	Oligonucleotide SE	1827	9.4	12.9	13	1	ABH37214	Oligonucleotide SE
c1755	9.4	12.9	13	1	ABC31427	Oligonucleotide SE	c1828	9.4	12.9	13	1	ABH14807	Oligonucleotide SE
c1756	9.4	12.9	13	1	ABC81439	Oligonucleotide SE	c1829	9.4	12.9	13	1	ABF64993	Oligonucleotide SE
c1757	9.4	12.9	13	1	ABC09266	Oligonucleotide SE	1830	9.4	12.9	13	1	ABH41554	Oligonucleotide SE
c1758	9.4	12.9	13	1	ABF09126	Oligonucleotide SE	c1831	9.4	12.9	13	1	ABH17224	Oligonucleotide SE
c1759	9.4	12.9	13	1	ABF09663	Oligonucleotide SE	1832	9.4	12.9	13	1	ABH43934	Oligonucleotide SE
c1760	9.4	12.9	13	1	ABC61966	Oligonucleotide SE	1833	9.4	12.9	13	1	ABH45774	Oligonucleotide SE
c1761	9.4	12.9	13	1	ABF12306	Oligonucleotide SE	1834	9.4	12.9	13	1	ABH49252	Oligonucleotide SE
c1762	9.4	12.9	13	1	ABC39011	Oligonucleotide SE	1835	9.4	12.9	13	1	ABH54962	Oligonucleotide SE
c1763	9.4	12.9	13	1	ABC39500	Oligonucleotide SE	1836	9.4	12.9	13	1	ABH60408	Oligonucleotide SE
c1764	9.4	12.9	13	1	ABC65327	Oligonucleotide SE	1837	9.4	12.9	13	1	ABH64193	Oligonucleotide SE
c1765	9.4	12.9	13	1	ABC41694	Oligonucleotide SE	c1838	9.4	12.9	13	1	ABC42384	Oligonucleotide SE
c1766	9.4	12.9	13	1	ABF22105	Oligonucleotide SE	c1839	9.4	12.9	13	1	ABC29839	Oligonucleotide SE
c1767	9.4	12.9	13	1	ABF25460	Oligonucleotide SE	c1840	9.4	12.9	13	1	ABC95529	Oligonucleotide SE
c1768	9.4	12.9	13	1	ABF27232	Oligonucleotide SE	1841	9.4	12.9	13	1	ABC21593	Oligonucleotide SE
c1769	9.4	12.9	13	1	ABF37359	Oligonucleotide SE	1842	9.4	12.9	13	1	ABC21784	Oligonucleotide SE
c1770	9.4	12.9	13	1	ABF67682	Oligonucleotide SE	1843	9.4	12.9	13	1	ABC97184	Oligonucleotide SE
c1771	9.4	12.9	13	1	ABH19413	Oligonucleotide SE	1844	9.4	12.9	13	1	ABC76273	Oligonucleotide SE
c1772	9.4	12.9	13	1	ABH21913	Oligonucleotide SE	c1845	9.4	12.9	13	1	ABC76827	Oligonucleotide SE
c1773	9.4	12.9	13	1	ABF47485	Oligonucleotide SE	1846	9.4	12.9	13	1	ABC27330	Oligonucleotide SE
c1774	9.4	12.9	13	1	ABH24254	Oligonucleotide SE	1847	9.4	12.9	13	1	ABC52784	Oligonucleotide SE
c1775	9.4	12.9	13	1	ABH26487	Oligonucleotide SE	c1848	9.4	12.9	13	1	ABC78033	Oligonucleotide SE
c1776	9.4	12.9	13	1	ABH04046	Oligonucleotide SE	1849	9.4	12.9	13	1	ABC28608	Oligonucleotide SE
c1777	9.4	12.9	13	1	ABF54250	Oligonucleotide SE	1850	9.4	12.9	13	1	ABF03754	Oligonucleotide SE
c1778	9.4	12.9	13	1	ABH32809	Oligonucleotide SE	c1851	9.4	12.9	13	1	ABC04591	Oligonucleotide SE
c1779	9.4	12.9	13	1	ABF58092	Oligonucleotide SE	1852	9.4	12.9	13	1	ABC54044	Oligonucleotide SE
c1780	9.4	12.9	13	1	ABH08558	Oligonucleotide SE	c1853	9.4	12.9	13	1	ABC05642	Oligonucleotide SE
c1781	9.4	12.9	13	1	ABF84335	Oligonucleotide SE	c1854	9.4	12.9	13	1	ABC55217	Oligonucleotide SE
c1782	9.4	12.9	13	1	ABF84808	Oligonucleotide SE	c1855	9.4	12.9	13	1	ABC30463	Oligonucleotide SE
c1783	9.4	12.9	13	1	ABF36075	Oligonucleotide SE	1856	9.4	12.9	13	1	ABF06322	Oligonucleotide SE
c1784	9.4	12.9	13	1	ABH37083	Oligonucleotide SE	1857	9.4	12.9	13	1	ABC57984	Oligonucleotide SE
c1785	9.4	12.9	13	1	ABH12346	Oligonucleotide SE	1858	9.4	12.9	13	1	ABC08883	Oligonucleotide SE

1859	9.4	12.9	13	1	ABC58136	Oligonucleotide SE	c1932	9.4	12.9	13	1	ABF49163	Oligonucleotide SE
1860	9.4	12.9	13	1	ABC64254	Oligonucleotide SE	1933	9.4	12.9	13	1	ABF99391	Oligonucleotide SE
1861	9.4	12.9	13	1	ABC64255	Oligonucleotide SE	c1934	9.4	12.9	13	1	ABH27230	Oligonucleotide SE
1862	9.4	12.9	13	1	ABCL11210	Oligonucleotide SE	1935	9.4	12.9	13	1	ABH27293	Oligonucleotide SE
1863	9.4	12.9	13	1	ABC688231	Oligonucleotide SE	c1936	9.4	12.9	13	1	ABH04047	Oligonucleotide SE
1864	9.4	12.9	13	1	ABC39266	Oligonucleotide SE	1937	9.4	12.9	13	1	ABH04878	Oligonucleotide SE
1865	9.4	12.9	13	1	ABC15528	Oligonucleotide SE	1938	9.4	12.9	13	1	ABH08285	Oligonucleotide SE
1866	9.4	12.9	13	1	ABC39901	Oligonucleotide SE	1939	9.4	12.9	13	1	ABH08918	Oligonucleotide SE
1867	9.4	12.9	13	1	ABC40250	Oligonucleotide SE	1940	9.4	12.9	13	1	ABH09269	Oligonucleotide SE
1868	9.4	12.9	13	1	ABF19666	Oligonucleotide SE	1941	9.4	12.9	13	1	ABH09784	Oligonucleotide SE
1869	9.4	12.9	13	1	ABF24055	Oligonucleotide SE	c1942	9.4	12.9	13	1	ABH37082	Oligonucleotide SE
1870	9.4	12.9	13	1	ABF331384	Oligonucleotide SE	1943	9.4	12.9	13	1	ABF62508	Oligonucleotide SE
1871	9.4	12.9	13	1	ABF333393	Oligonucleotide SE	c1944	9.4	12.9	13	1	ABH38409	Oligonucleotide SE
1872	9.4	12.9	13	1	ABF35481	Oligonucleotide SE	1945	9.4	12.9	13	1	ABH39906	Oligonucleotide SE
1873	9.4	12.9	13	1	ABF35871	Oligonucleotide SE	c1946	9.4	12.9	13	1	ABH16021	Oligonucleotide SE
1874	9.4	12.9	13	1	ABH18330	Oligonucleotide SE	1947	9.4	12.9	13	1	ABH41301	Oligonucleotide SE
1875	9.4	12.9	13	1	ABH19171	Oligonucleotide SE	c1948	9.4	12.9	13	1	ABH48736	Oligonucleotide SE
1876	9.4	12.9	13	1	ABF70122	Oligonucleotide SE	1949	9.4	12.9	13	1	ABH48737	Oligonucleotide SE
1877	9.4	12.9	13	1	ABF70123	Oligonucleotide SE	1950	9.4	12.9	13	1	ABH62570	Oligonucleotide SE
1878	9.4	12.9	13	1	ABF71267	Oligonucleotide SE	c1951	9.4	12.9	13	1	ABC92841	Oligonucleotide SE
1879	9.4	12.9	13	1	ABF47484	Oligonucleotide SE	1952	9.4	12.9	13	1	ABC93438	Oligonucleotide SE
1880	9.4	12.9	13	1	ABH00157	Oligonucleotide SE	c1953	9.4	12.9	13	1	ABC94164	Oligonucleotide SE
1881	9.4	12.9	13	1	ABF75624	Oligonucleotide SE	1954	9.4	12.9	13	1	ABC69635	Oligonucleotide SE
1882	9.4	12.9	13	1	ABH27291	Oligonucleotide SE	c1955	9.4	12.9	13	1	ABC96215	Oligonucleotide SE
1883	9.4	12.9	13	1	ABH03394	Oligonucleotide SE	1956	9.4	12.9	13	1	ABC50400	Oligonucleotide SE
1884	9.4	12.9	13	1	ABF54251	Oligonucleotide SE	c1957	9.4	12.9	13	1	ABC51417	Oligonucleotide SE
1885	9.4	12.9	13	1	ABH04879	Oligonucleotide SE	1958	9.4	12.9	13	1	ABC76944	Oligonucleotide SE
1886	9.4	12.9	13	1	ABH32349	Oligonucleotide SE	c1959	9.4	12.9	13	1	ABC76945	Oligonucleotide SE
1887	9.4	12.9	13	1	ABH35003	Oligonucleotide SE	1960	9.4	12.9	13	1	ABF02724	Oligonucleotide SE
1888	9.4	12.9	13	1	ABF95805	Oligonucleotide SE	1961	9.4	12.9	13	1	ABC03283	Oligonucleotide SE
1889	9.4	12.9	13	1	ABH36111	Oligonucleotide SE	c1962	9.4	12.9	13	1	ABC28609	Oligonucleotide SE
1890	9.4	12.9	13	1	ABF60977	Oligonucleotide SE	1963	9.4	12.9	13	1	ABC54365	Oligonucleotide SE
1891	9.4	12.9	13	1	ABF61732	Oligonucleotide SE	c1964	9.4	12.9	13	1	ABC05709	Oligonucleotide SE
1892	9.4	12.9	13	1	ABH12114	Oligonucleotide SE	1965	9.4	12.9	13	1	ABC31036	Oligonucleotide SE
1893	9.4	12.9	13	1	ABH12344	Oligonucleotide SE	c1966	9.4	12.9	13	1	ABF06502	Oligonucleotide SE
1894	9.4	12.9	13	1	ABF65193	Oligonucleotide SE	1967	9.4	12.9	13	1	ABF07528	Oligonucleotide SE
1895	9.4	12.9	13	1	ABF91550	Oligonucleotide SE	c1968	9.4	12.9	13	1	ABC83282	Oligonucleotide SE
1896	9.4	12.9	13	1	ABH44397	Oligonucleotide SE	1969	9.4	12.9	13	1	ABC88315	Oligonucleotide SE
1897	9.4	12.9	13	1	ABH51303	Oligonucleotide SE	c1970	9.4	12.9	13	1	ABC14556	Oligonucleotide SE
1898	9.4	12.9	13	1	ABH53761	Oligonucleotide SE	1971	9.4	12.9	13	1	ABC39739	Oligonucleotide SE
1899	9.4	12.9	13	1	ABH56303	Oligonucleotide SE	c1972	9.4	12.9	13	1	ABC15529	Oligonucleotide SE
1900	9.4	12.9	13	1	ABH56778	Oligonucleotide SE	1973	9.4	12.9	13	1	ABC90607	Oligonucleotide SE
1901	9.4	12.9	13	1	ABH58032	Oligonucleotide SE	1974	9.4	12.9	13	1	ABC41056	Oligonucleotide SE
1902	9.4	12.9	13	1	ABH58033	Oligonucleotide SE	c1975	9.4	12.9	13	1	ABF23911	Oligonucleotide SE
1903	9.4	12.9	13	1	ABC42385	Oligonucleotide SE	1976	9.4	12.9	13	1	ABF26454	Oligonucleotide SE
1904	9.4	12.9	13	1	ABC93031	Oligonucleotide SE	1977	9.4	12.9	13	1	ABF28322	Oligonucleotide SE
1905	9.4	12.9	13	1	ABC68200	Oligonucleotide SE	1978	9.4	12.9	13	1	ABF31786	Oligonucleotide SE
1906	9.4	12.9	13	1	ABC49342	Oligonucleotide SE	1979	9.4	12.9	13	1	ABF33102	Oligonucleotide SE
1907	9.4	12.9	13	1	ABC49342	Oligonucleotide SE	1980	9.4	12.9	13	1	ABF35870	Oligonucleotide SE
1908	9.4	12.9	13	1	ABF02725	Oligonucleotide SE	c1981	9.4	12.9	13	1	ABF69351	Oligonucleotide SE
1909	9.4	12.9	13	1	ABC52785	Oligonucleotide SE	1982	9.4	12.9	13	1	ABF71904	Oligonucleotide SE
1910	9.4	12.9	13	1	ABC28261	Oligonucleotide SE	1983	9.4	12.9	13	1	ABF97555	Oligonucleotide SE
1911	9.4	12.9	13	1	ABC54045	Oligonucleotide SE	c1984	9.4	12.9	13	1	ABF75625	Oligonucleotide SE
1912	9.4	12.9	13	1	ABC54363	Oligonucleotide SE	1985	9.4	12.9	13	1	ABH26486	Oligonucleotide SE
1913	9.4	12.9	13	1	ABC31037	Oligonucleotide SE	c1986	9.4	12.9	13	1	ABF27856	Oligonucleotide SE
1914	9.4	12.9	13	1	ABF06503	Oligonucleotide SE	1987	9.4	12.9	13	1	ABF78024	Oligonucleotide SE
1915	9.4	12.9	13	1	ABC32308	Oligonucleotide SE	c1988	9.4	12.9	13	1	ABF80152	Oligonucleotide SE
1916	9.4	12.9	13	1	ABC83376	Oligonucleotide SE	1989	9.4	12.9	13	1	ABF81512	Oligonucleotide SE
1917	9.4	12.9	13	1	ABC83377	Oligonucleotide SE	c1990	9.4	12.9	13	1	ABF58535	Oligonucleotide SE
1918	9.4	12.9	13	1	ABC58827	Oligonucleotide SE	c1991	9.4	12.9	13	1	ABF58980	Oligonucleotide SE
1919	9.4	12.9	13	1	ABC661967	Oligonucleotide SE	c1992	9.4	12.9	13	1	ABH09268	Oligonucleotide SE
1920	9.4	12.9	13	1	ABC37801	Oligonucleotide SE	1993	9.4	12.9	13	1	ABH35484	Oligonucleotide SE
1921	9.4	12.9	13	1	ABC62945	Oligonucleotide SE	c1994	9.4	12.9	13	1	ABH35485	Oligonucleotide SE
1922	9.4	12.9	13	1	ABF13697	Oligonucleotide SE	c1995	9.4	12.9	13	1	ABH11307	Oligonucleotide SE
1923	9.4	12.9	13	1	ABCL15495	Oligonucleotide SE	c1996	9.4	12.9	13	1	ABH12345	Oligonucleotide SE
1924	9.4	12.9	13	1	ABF233910	Oligonucleotide SE	c1997	9.4	12.9	13	1	ABF89075	Oligonucleotide SE
1925	9.4	12.9	13	1	ABF24054	Oligonucleotide SE	c1998	9.4	12.9	13	1	ABH39555	Oligonucleotide SE
1926	9.4	12.9	13	1	ABF37358	Oligonucleotide SE	1999	9.4	12.9	13	1	ABF65192	Oligonucleotide SE
1927	9.4	12.9	13	1	ABH18331	Oligonucleotide SE	c2000	9.4	12.9	13	1	ABH17045	Oligonucleotide SE
1928	9.4	12.9	13	1	ABH19170	Oligonucleotide SE	c2001	9.4	12.9	13	1	ABH45775	Oligonucleotide SE
1929	9.4	12.9	13	1	ABF94183	Oligonucleotide SE	c2002	9.4	12.9	13	1	ABH56302	Oligonucleotide SE
1930	9.4	12.9	13	1	ABF44660	Oligonucleotide SE	c2003	9.4	12.9	13	1	ABH60409	Oligonucleotide SE
1931	9.4	12.9	13	1	ABF73295	Oligonucleotide SE	c2004	9.4	12.9	13	1	ABH65132	Oligonucleotide SE

c2005	9.4	12.9	13	1	ABC42529	Oligonucleotide SE	c2078	9.4	12.9	13	1	ABC62350	Oligonucleotide SE
c2006	9.4	12.9	13	1	ABC69634	Oligonucleotide SE	2079	9.4	12.9	13	1	ABC62944	Oligonucleotide SE
c2007	9.4	12.9	13	1	ABC22207	Oligonucleotide SE	2080	9.4	12.9	13	1	ABC88230	Oligonucleotide SE
c2008	9.4	12.9	13	1	ABC24678	Oligonucleotide SE	c2081	9.4	12.9	13	1	ABC39898	Oligonucleotide SE
c2009	9.4	12.9	13	1	ABC49649	Oligonucleotide SE	2082	9.4	12.9	13	1	ABF24038	Oligonucleotide SE
c2010	9.4	12.9	13	1	ABF01571	Oligonucleotide SE	c2083	9.4	12.9	13	1	ABF34394	Oligonucleotide SE
c2011	9.4	12.9	13	1	ABC54212	Oligonucleotide SE	2084	9.4	12.9	13	1	ABF43100	Oligonucleotide SE
c2012	9.4	12.9	13	1	ABC05643	Oligonucleotide SE	c2085	9.4	12.9	13	1	ABF93667	Oligonucleotide SE
c2013	9.4	12.9	13	1	ABF05984	Oligonucleotide SE	2086	9.4	12.9	13	1	ABF69696	Oligonucleotide SE
c2014	9.4	12.9	13	1	ABF09665	Oligonucleotide SE	2087	9.4	12.9	13	1	ABF97821	Oligonucleotide SE
c2015	9.4	12.9	13	1	ABC10378	Oligonucleotide SE	2088	9.4	12.9	13	1	ABF98719	Oligonucleotide SE
c2016	9.4	12.9	13	1	ABC86604	Oligonucleotide SE	c2089	9.4	12.9	13	1	ABF99133	Oligonucleotide SE
c2017	9.4	12.9	13	1	ABC12758	Oligonucleotide SE	2090	9.4	12.9	13	1	ABF49158	Oligonucleotide SE
c2018	9.4	12.9	13	1	ABC63662	Oligonucleotide SE	c2091	9.4	12.9	13	1	ABF43159	Oligonucleotide SE
c2019	9.4	12.9	13	1	ABC39012	Oligonucleotide SE	c2092	9.4	12.9	13	1	ABH02911	Oligonucleotide SE
c2020	9.4	12.9	13	1	ABC63715	Oligonucleotide SE	c2093	9.4	12.9	13	1	ABH03167	Oligonucleotide SE
c2021	9.4	12.9	13	1	ABC41695	Oligonucleotide SE	2094	9.4	12.9	13	1	ABH29650	Oligonucleotide SE
c2022	9.4	12.9	13	1	ABC42115	Oligonucleotide SE	c2095	9.4	12.9	13	1	ABF80121	Oligonucleotide SE
c2023	9.4	12.9	13	1	ABF17079	Oligonucleotide SE	2096	9.4	12.9	13	1	ABH05318	Oligonucleotide SE
c2024	9.4	12.9	13	1	ABF33392	Oligonucleotide SE	2097	9.4	12.9	13	1	ABF84334	Oligonucleotide SE
c2025	9.4	12.9	13	1	ABF36955	Oligonucleotide SE	2098	9.4	12.9	13	1	ABF86653	Oligonucleotide SE
c2026	9.4	12.9	13	1	ABF67683	Oligonucleotide SE	2099	9.4	12.9	13	1	ABH38408	Oligonucleotide SE
c2027	9.4	12.9	13	1	ABF43101	Oligonucleotide SE	2100	9.4	12.9	13	1	ABH13480	Oligonucleotide SE
c2028	9.4	12.9	13	1	ABF93304	Oligonucleotide SE	c2101	9.4	12.9	13	1	ABH48201	Oligonucleotide SE
c2029	9.4	12.9	13	1	ABF69697	Oligonucleotide SE	c2102	9.4	12.9	13	1	ABH49253	Oligonucleotide SE
c2030	9.4	12.9	13	1	ABF95993	Oligonucleotide SE	2103	9.4	12.9	13	1	ABH49876	Oligonucleotide SE
c2031	9.4	12.9	13	1	ABH24855	Oligonucleotide SE	c2104	9.4	12.9	13	1	ABH49877	Oligonucleotide SE
c2032	9.4	12.9	13	1	ABH00851	Oligonucleotide SE	2105	9.4	12.9	13	1	ABH56779	Oligonucleotide SE
c2033	9.4	12.9	13	1	ABH26960	Oligonucleotide SE	2106	9.4	12.9	13	1	ABF96214	Oligonucleotide SE
c2034	9.4	12.9	13	1	ABF77162	Oligonucleotide SE	c2107	9.4	12.9	13	1	ABC21548	Oligonucleotide SE
c2035	9.4	12.9	13	1	ABH27350	Oligonucleotide SE	2108	9.4	12.9	13	1	ABC75195	Oligonucleotide SE
c2036	9.4	12.9	13	1	ABH02335	Oligonucleotide SE	2109	9.4	12.9	13	1	ABC76824	Oligonucleotide SE
c2037	9.4	12.9	13	1	ABF27852	Oligonucleotide SE	2110	9.4	12.9	13	1	ABC02656	Oligonucleotide SE
c2038	9.4	12.9	13	1	ABF53194	Oligonucleotide SE	c2111	9.4	12.9	13	1	ABC52856	Oligonucleotide SE
c2039	9.4	12.9	13	1	ABF53195	Oligonucleotide SE	2112	9.4	12.9	13	1	ABC52856	Oligonucleotide SE
c2040	9.4	12.9	13	1	ABH05016	Oligonucleotide SE	c2113	9.4	12.9	13	1	ABF03834	Oligonucleotide SE
c2041	9.4	12.9	13	1	ABH05319	Oligonucleotide SE	2114	9.4	12.9	13	1	ABF03834	Oligonucleotide SE
c2042	9.4	12.9	13	1	ABH08286	Oligonucleotide SE	c2115	9.4	12.9	13	1	ABF08289	Oligonucleotide SE
c2043	9.4	12.9	13	1	ABF84809	Oligonucleotide SE	c2116	9.4	12.9	13	1	ABF09127	Oligonucleotide SE
c2044	9.4	12.9	13	1	ABF86652	Oligonucleotide SE	2117	9.4	12.9	13	1	ABF11072	Oligonucleotide SE
c2045	9.4	12.9	13	1	ABH12115	Oligonucleotide SE	2118	9.4	12.9	13	1	ABC16198	Oligonucleotide SE
c2046	9.4	12.9	13	1	ABF62511	Oligonucleotide SE	2119	9.4	12.9	13	1	ABC65326	Oligonucleotide SE
c2047	9.4	12.9	13	1	ABH39554	Oligonucleotide SE	c2120	9.4	12.9	13	1	ABF19667	Oligonucleotide SE
c2048	9.4	12.9	13	1	ABF65320	Oligonucleotide SE	2121	9.4	12.9	13	1	ABF22976	Oligonucleotide SE
c2049	9.4	12.9	13	1	ABH16168	Oligonucleotide SE	c2122	9.4	12.9	13	1	ABF23069	Oligonucleotide SE
c2050	9.4	12.9	13	1	ABH16169	Oligonucleotide SE	c2123	9.4	12.9	13	1	ABF25014	Oligonucleotide SE
c2051	9.4	12.9	13	1	ABF91690	Oligonucleotide SE	c2124	9.4	12.9	13	1	ABF27233	Oligonucleotide SE
c2052	9.4	12.9	13	1	ABH48620	Oligonucleotide SE	2125	9.4	12.9	13	1	ABF34395	Oligonucleotide SE
c2053	9.4	12.9	13	1	ABH48621	Oligonucleotide SE	c2126	9.4	12.9	13	1	ABF36953	Oligonucleotide SE
c2054	9.4	12.9	13	1	ABH53443	Oligonucleotide SE	2127	9.4	12.9	13	1	ABF72081	Oligonucleotide SE
c2055	9.4	12.9	13	1	ABH63301	Oligonucleotide SE	2128	9.4	12.9	13	1	ABF97140	Oligonucleotide SE
c2056	9.4	12.9	13	1	ABH64250	Oligonucleotide SE	c2129	9.4	12.9	13	1	ABF97141	Oligonucleotide SE
c2057	9.4	12.9	13	1	ABC92840	Oligonucleotide SE	2130	9.4	12.9	13	1	ABF73553	Oligonucleotide SE
c2058	9.4	12.9	13	1	ABC19744	Oligonucleotide SE	2131	9.4	12.9	13	1	ABH01943	Oligonucleotide SE
c2059	9.4	12.9	13	1	ABC19745	Oligonucleotide SE	c2132	9.4	12.9	13	1	ABH01944	Oligonucleotide SE
c2060	9.4	12.9	13	1	ABC46268	Oligonucleotide SE	2133	9.4	12.9	13	1	ABF77492	Oligonucleotide SE
c2061	9.4	12.9	13	1	ABC97849	Oligonucleotide SE	2134	9.4	12.9	13	1	ABF28110	Oligonucleotide SE
c2062	9.4	12.9	13	1	ABC97968	Oligonucleotide SE	2135	9.4	12.9	13	1	ABH03166	Oligonucleotide SE
c2063	9.4	12.9	13	1	ABC23952	Oligonucleotide SE	c2136	9.4	12.9	13	1	ABF79263	Oligonucleotide SE
c2064	9.4	12.9	13	1	ABC23953	Oligonucleotide SE	c2137	9.4	12.9	13	1	ABH06003	Oligonucleotide SE
c2065	9.4	12.9	13	1	ABC50396	Oligonucleotide SE	2138	9.4	12.9	13	1	ABF82588	Oligonucleotide SE
c2066	9.4	12.9	13	1	ABC01572	Oligonucleotide SE	c2139	9.4	12.9	13	1	ABH32808	Oligonucleotide SE
c2067	9.4	12.9	13	1	ABC01573	Oligonucleotide SE	2140	9.4	12.9	13	1	ABF59981	Oligonucleotide SE
c2068	9.4	12.9	13	1	ABF01570	Oligonucleotide SE	2141	9.4	12.9	13	1	ABF63910	Oligonucleotide SE
c2069	9.4	12.9	13	1	ABC02900	Oligonucleotide SE	c2142	9.4	12.9	13	1	ABH41303	Oligonucleotide SE
c2070	9.4	12.9	13	1	ABC54128	Oligonucleotide SE	c2143	9.4	12.9	13	1	ABH42158	Oligonucleotide SE
c2071	9.4	12.9	13	1	ABF04552	Oligonucleotide SE	c2144	9.4	12.9	13	1	ABH17225	Oligonucleotide SE
c2072	9.4	12.9	13	1	ABF05163	Oligonucleotide SE	2145	9.4	12.9	13	1	ABH53442	Oligonucleotide SE
c2073	9.4	12.9	13	1	ABC81754	Oligonucleotide SE	c2146	9.4	12.9	13	1	ABH57691	Oligonucleotide SE
c2074	9.4	12.9	13	1	ABF09992	Oligonucleotide SE	c2147	9.4	12.9	13	1	ABC93473	Oligonucleotide SE
c2075	9.4	12.9	13	1	ABF09993	Oligonucleotide SE	2148	9.4	12.9	13	1	ABC95532	Oligonucleotide SE
c2076	9.4	12.9	13	1	ABC12223	Oligonucleotide SE	c2149	9.4	12.9	13	1	ABC97185	Oligonucleotide SE
c2077	9.4	12.9	13	1	ABC66605	Oligonucleotide SE	2150	9.4	12.9	13	1	ABC48828	Oligonucleotide SE

2151	9.4	12.9	13	1	ABC02862	Oligonucleotide SE	2224	9.4	12.9	13	1	ABF73294	Oligonucleotide SE
2152	9.4	12.9	13	1	ABC27564	Oligonucleotide SE	2225	9.4	12.9	13	1	ABF49518	Oligonucleotide SE
2153	9.4	12.9	13	1	ABC28611	Oligonucleotide SE	2226	9.4	12.9	13	1	ABF49519	Oligonucleotide SE
2154	9.4	12.9	13	1	ABC29148	Oligonucleotide SE	2227	9.4	12.9	13	1	ABH25153	Oligonucleotide SE
2155	9.4	12.9	13	1	ABC79370	Oligonucleotide SE	2228	9.4	12.9	13	1	ABH00850	Oligonucleotide SE
2156	9.4	12.9	13	1	ABC54364	Oligonucleotide SE	2229	9.4	12.9	13	1	ABF78025	Oligonucleotide SE
2157	9.4	12.9	13	1	ABC54911	Oligonucleotide SE	2230	9.4	12.9	13	1	ABF80153	Oligonucleotide SE
2158	9.4	12.9	13	1	ABF05162	Oligonucleotide SE	2231	9.4	12.9	13	1	ABH05542	Oligonucleotide SE
2159	9.4	12.9	13	1	ABC83283	Oligonucleotide SE	2232	9.4	12.9	13	1	ABH05543	Oligonucleotide SE
2160	9.4	12.9	13	1	ABF09684	Oligonucleotide SE	2233	9.4	12.9	13	1	ABH05543	Oligonucleotide SE
2161	9.4	12.9	13	1	ABF09684	Oligonucleotide SE	2234	9.4	12.9	13	1	ABF80831	Oligonucleotide SE
2162	9.4	12.9	13	1	ABC11859	Oligonucleotide SE	2235	9.4	12.9	13	1	ABF81513	Oligonucleotide SE
2163	9.4	12.9	13	1	ABC62351	Oligonucleotide SE	2236	9.4	12.9	13	1	ABH08284	Oligonucleotide SE
2164	9.4	12.9	13	1	ABF13771	Oligonucleotide SE	2237	9.4	12.9	13	1	ABH08919	Oligonucleotide SE
2165	9.4	12.9	13	1	ABC90606	Oligonucleotide SE	2238	9.4	12.9	13	1	ABH10811	Oligonucleotide SE
2166	9.4	12.9	13	1	ABF17078	Oligonucleotide SE	2239	9.4	12.9	13	1	ABH11417	Oligonucleotide SE
2167	9.4	12.9	13	1	ABF19570	Oligonucleotide SE	2240	9.4	12.9	13	1	ABF62509	Oligonucleotide SE
2168	9.4	12.9	13	1	ABF20583	Oligonucleotide SE	2241	9.4	12.9	13	1	ABH39907	Oligonucleotide SE
2169	9.4	12.9	13	1	ABF25015	Oligonucleotide SE	2242	9.4	12.9	13	1	ABH17044	Oligonucleotide SE
2170	9.4	12.9	13	1	ABF36398	Oligonucleotide SE	2243	9.4	12.9	13	1	ABH51807	Oligonucleotide SE
2171	9.4	12.9	13	1	ABF36954	Oligonucleotide SE	2244	9.4	12.9	13	1	ABH53897	Oligonucleotide SE
2172	9.4	12.9	13	1	ABF39204	Oligonucleotide SE	2245	9.4	12.9	13	1	ABH54963	Oligonucleotide SE
2173	9.4	12.9	13	1	ABF43154	Oligonucleotide SE	2246	9.4	12.9	13	1	ABH56216	Oligonucleotide SE
2174	9.4	12.9	13	1	ABH18958	Oligonucleotide SE	2247	9.4	12.9	13	1	ABH56217	Oligonucleotide SE
2175	9.4	12.9	13	1	ABF69350	Oligonucleotide SE	2248	9.4	12.9	13	1	ABC93030	Oligonucleotide SE
2176	9.4	12.9	13	1	ABF71266	Oligonucleotide SE	2249	9.4	12.9	13	1	ABC94165	Oligonucleotide SE
2177	9.4	12.9	13	1	ABH23858	Oligonucleotide SE	2250	9.4	12.9	13	1	ABG94166	Oligonucleotide SE
2178	9.4	12.9	13	1	ABF99132	Oligonucleotide SE	2251	9.4	12.9	13	1	ABG94696	Oligonucleotide SE
2179	9.4	12.9	13	1	ABF75594	Oligonucleotide SE	2252	9.4	12.9	13	1	ABC21177	Oligonucleotide SE
2180	9.4	12.9	13	1	ABH01942	Oligonucleotide SE	2253	9.4	12.9	13	1	ABC71594	Oligonucleotide SE
2181	9.4	12.9	13	1	ABH02044	Oligonucleotide SE	2254	9.4	12.9	13	1	ABC71614	Oligonucleotide SE
2182	9.4	12.9	13	1	ABF79262	Oligonucleotide SE	2255	9.4	12.9	13	1	ABC23944	Oligonucleotide SE
2183	9.4	12.9	13	1	ABF54515	Oligonucleotide SE	2256	9.4	12.9	13	1	ABC49343	Oligonucleotide SE
2184	9.4	12.9	13	1	ABF80120	Oligonucleotide SE	2257	9.4	12.9	13	1	ABG99598	Oligonucleotide SE
2185	9.4	12.9	13	1	ABF84017	Oligonucleotide SE	2258	9.4	12.9	13	1	ABF00358	Oligonucleotide SE
2186	9.4	12.9	13	1	ABF84447	Oligonucleotide SE	2259	9.4	12.9	13	1	ABC76826	Oligonucleotide SE
2187	9.4	12.9	13	1	ABH11656	Oligonucleotide SE	2260	9.4	12.9	13	1	ABF02166	Oligonucleotide SE
2188	9.4	12.9	13	1	ABF89074	Oligonucleotide SE	2261	9.4	12.9	13	1	ABC04590	Oligonucleotide SE
2189	9.4	12.9	13	1	ABF64992	Oligonucleotide SE	2262	9.4	12.9	13	1	ABF07529	Oligonucleotide SE
2190	9.4	12.9	13	1	ABH41302	Oligonucleotide SE	2263	9.4	12.9	13	1	ABCL1211	Oligonucleotide SE
2191	9.4	12.9	13	1	ABH45111	Oligonucleotide SE	2264	9.4	12.9	13	1	ABF12307	Oligonucleotide SE
2192	9.4	12.9	13	1	ABH51806	Oligonucleotide SE	2265	9.4	12.9	13	1	ABC64238	Oligonucleotide SE
2193	9.4	12.9	13	1	ABH59080	Oligonucleotide SE	2266	9.4	12.9	13	1	ABF20919	Oligonucleotide SE
2194	9.4	12.9	13	1	ABH61585	Oligonucleotide SE	2267	9.4	12.9	13	1	ABF22314	Oligonucleotide SE
2195	9.4	12.9	13	1	ABG94167	Oligonucleotide SE	2268	9.4	12.9	13	1	ABF22315	Oligonucleotide SE
2196	9.4	12.9	13	1	ABC70879	Oligonucleotide SE	2269	9.4	12.9	13	1	ABF31639	Oligonucleotide SE
2197	9.4	12.9	13	1	ABF00359	Oligonucleotide SE	2270	9.4	12.9	13	1	ABF36399	Oligonucleotide SE
2198	9.4	12.9	13	1	ABC76021	Oligonucleotide SE	2271	9.4	12.9	13	1	ABF39205	Oligonucleotide SE
2199	9.4	12.9	13	1	ABF01247	Oligonucleotide SE	2272	9.4	12.9	13	1	ABH18708	Oligonucleotide SE
2200	9.4	12.9	13	1	ABC76319	Oligonucleotide SE	2273	9.4	12.9	13	1	ABH19412	Oligonucleotide SE
2201	9.4	12.9	13	1	ABF02167	Oligonucleotide SE	2274	9.4	12.9	13	1	ABF95992	Oligonucleotide SE
2202	9.4	12.9	13	1	ABF03953	Oligonucleotide SE	2275	9.4	12.9	13	1	ABF73484	Oligonucleotide SE
2203	9.4	12.9	13	1	ABC81755	Oligonucleotide SE	2276	9.4	12.9	13	1	ABF98718	Oligonucleotide SE
2204	9.4	12.9	13	1	ABC34458	Oligonucleotide SE	2277	9.4	12.9	13	1	ABF99598	Oligonucleotide SE
2205	9.4	12.9	13	1	ABC12759	Oligonucleotide SE	2278	9.4	12.9	13	1	ABF76919	Oligonucleotide SE
2206	9.4	12.9	13	1	ABC37822	Oligonucleotide SE	2279	9.4	12.9	13	1	ABF77163	Oligonucleotide SE
2207	9.4	12.9	13	1	ABC37823	Oligonucleotide SE	2280	9.4	12.9	13	1	ABF77491	Oligonucleotide SE
2208	9.4	12.9	13	1	ABC88873	Oligonucleotide SE	2281	9.4	12.9	13	1	ABH03292	Oligonucleotide SE
2209	9.4	12.9	13	1	ABF13696	Oligonucleotide SE	2282	9.4	12.9	13	1	ABH03293	Oligonucleotide SE
2210	9.4	12.9	13	1	ABC39013	Oligonucleotide SE	2283	9.4	12.9	13	1	ABF54514	Oligonucleotide SE
2211	9.4	12.9	13	1	ABC15494	Oligonucleotide SE	2284	9.4	12.9	13	1	ABF84446	Oligonucleotide SE
2212	9.4	12.9	13	1	ABC65724	Oligonucleotide SE	2285	9.4	12.9	13	1	ABH35002	Oligonucleotide SE
2213	9.4	12.9	13	1	ABF19571	Oligonucleotide SE	2286	9.4	12.9	13	1	ABF85689	Oligonucleotide SE
2214	9.4	12.9	13	1	ABF20918	Oligonucleotide SE	2287	9.4	12.9	13	1	ABH10810	Oligonucleotide SE
2215	9.4	12.9	13	1	ABF26357	Oligonucleotide SE	2288	9.4	12.9	13	1	ABH36074	Oligonucleotide SE
2216	9.4	12.9	13	1	ABF33301	Oligonucleotide SE	2289	9.4	12.9	13	1	ABH11306	Oligonucleotide SE
2217	9.4	12.9	13	1	ABF35480	Oligonucleotide SE	2290	9.4	12.9	13	1	ABF62510	Oligonucleotide SE
2218	9.4	12.9	13	1	ABF43103	Oligonucleotide SE	2291	9.4	12.9	13	1	ABH13467	Oligonucleotide SE
2219	9.4	12.9	13	1	ABF93305	Oligonucleotide SE	2292	9.4	12.9	13	1	ABF91691	Oligonucleotide SE
2220	9.4	12.9	13	1	ABF43685	Oligonucleotide SE	2293	9.4	12.9	13	1	ABH44396	Oligonucleotide SE
2221	9.4	12.9	13	1	ABF44656	Oligonucleotide SE	2294	9.4	12.9	13	1	ABH46225	Oligonucleotide SE
2222	9.4	12.9	13	1	ABF44661	Oligonucleotide SE	2295	9.4	12.9	13	1	ABH48200	Oligonucleotide SE
2223	9.4	12.9	13	1	ABF95996	Oligonucleotide SE	2296	9.4	12.9	13	1	ABH63900	Oligonucleotide SE

c2297	9.4	12.9	13	1	ABH64192	Oligonucleotide SE
c2298	9.4	12.9	13	1	ABC68000	Oligonucleotide SE
c2299	9.4	12.9	13	1	ABC95528	Oligonucleotide SE
c2300	9.4	12.9	13	1	ABC45646	Oligonucleotide SE
c2301	9.4	12.9	13	1	ABC70878	Oligonucleotide SE
c2302	9.4	12.9	13	1	ABC71543	Oligonucleotide SE
c2303	9.4	12.9	13	1	ABC50398	Oligonucleotide SE
c2304	9.4	12.9	13	1	ABC51036	Oligonucleotide SE
c2305	9.4	12.9	13	1	ABC51416	Oligonucleotide SE
c2306	9.4	12.9	13	1	ABF02160	Oligonucleotide SE
c2307	9.4	12.9	13	1	ABC03281	Oligonucleotide SE
c2308	9.4	12.9	13	1	ABC03282	Oligonucleotide SE
c2309	9.4	12.9	13	1	ABC54362	Oligonucleotide SE
c2310	9.4	12.9	13	1	ABF04553	Oligonucleotide SE
c2311	9.4	12.9	13	1	ABC55216	Oligonucleotide SE
c2312	9.4	12.9	13	1	ABC32309	Oligonucleotide SE
c2313	9.4	12.9	13	1	ABF08288	Oligonucleotide SE
c2314	9.4	12.9	13	1	ABC85621	Oligonucleotide SE
c2315	9.4	12.9	13	1	ABF11073	Oligonucleotide SE
c2316	9.4	12.9	13	1	ABC86657	Oligonucleotide SE
c2317	9.4	12.9	13	1	ABC39267	Oligonucleotide SE
c2318	9.4	12.9	13	1	ABC64239	Oligonucleotide SE
c2319	9.4	12.9	13	1	ABC64623	Oligonucleotide SE
c2320	9.4	12.9	13	1	ABC65725	Oligonucleotide SE
c2321	9.4	12.9	13	1	ABF22977	Oligonucleotide SE
c2322	9.4	12.9	13	1	ABF25463	Oligonucleotide SE
c2323	9.4	12.9	13	1	ABF31385	Oligonucleotide SE
c2324	9.4	12.9	13	1	ABF33100	Oligonucleotide SE
c2325	9.4	12.9	13	1	ABF33103	Oligonucleotide SE
c2326	9.4	12.9	13	1	ABF93270	Oligonucleotide SE
c2327	9.4	12.9	13	1	ABH18959	Oligonucleotide SE
c2328	9.4	12.9	13	1	ABF94182	Oligonucleotide SE
c2329	9.4	12.9	13	1	ABF97554	Oligonucleotide SE
c2330	9.4	12.9	13	1	ABF97820	Oligonucleotide SE
c2331	9.4	12.9	13	1	ABH23859	Oligonucleotide SE
c2332	9.4	12.9	13	1	ABF99390	Oligonucleotide SE
c2333	9.4	12.9	13	1	ABF76918	Oligonucleotide SE
c2334	9.4	12.9	13	1	ABF77490	Oligonucleotide SE
c2335	9.4	12.9	13	1	ABF77493	Oligonucleotide SE
c2336	9.4	12.9	13	1	ABH27857	Oligonucleotide SE
c2337	9.4	12.9	13	1	ABH03288	Oligonucleotide SE
c2338	9.4	12.9	13	1	ABH04897	Oligonucleotide SE
c2339	9.4	12.9	13	1	ABH05320	Oligonucleotide SE
c2340	9.4	12.9	13	1	ABH32348	Oligonucleotide SE
c2341	9.4	12.9	13	1	ABF57799	Oligonucleotide SE
c2342	9.4	12.9	13	1	ABF58534	Oligonucleotide SE
c2343	9.4	12.9	13	1	ABH36110	Oligonucleotide SE
c2344	9.4	12.9	13	1	ABF60976	Oligonucleotide SE
c2345	9.4	12.9	13	1	ABH11416	Oligonucleotide SE
c2346	9.4	12.9	13	1	ABF62774	Oligonucleotide SE
c2347	9.4	12.9	13	1	ABH14483	Oligonucleotide SE
c2348	9.4	12.9	13	1	ABF65321	Oligonucleotide SE
c2349	9.4	12.9	13	1	ABH45848	Oligonucleotide SE
c2350	9.4	12.9	13	1	ABH45849	Oligonucleotide SE
c2351	9.4	12.9	13	1	ABH47705	Oligonucleotide SE
c2352	9.4	12.9	13	1	ABH59081	Oligonucleotide SE
c2353	9.4	12.9	13	1	ABH64251	Oligonucleotide SE
c2354	9.4	12.9	13	1	ABH65133	Oligonucleotide SE
c2355	9.4	12.9	13	1	ABH65663	Oligonucleotide SE
c2356	9.4	12.9	13	1	ABC93439	Oligonucleotide SE
c2357	9.4	12.9	13	1	ABC23176	Oligonucleotide SE
c2358	9.4	12.9	13	1	ABH71542	Oligonucleotide SE
c2359	9.4	12.9	13	1	ABC21549	Oligonucleotide SE
c2360	9.4	12.9	13	1	ABH71615	Oligonucleotide SE
c2361	9.4	12.9	13	1	ABC97969	Oligonucleotide SE
c2362	9.4	12.9	13	1	ABC98916	Oligonucleotide SE
c2363	9.4	12.9	13	1	ABC48829	Oligonucleotide SE
c2364	9.4	12.9	13	1	ABC75194	Oligonucleotide SE
c2365	9.4	12.9	13	1	ABC03280	Oligonucleotide SE
c2366	9.4	12.9	13	1	ABF03952	Oligonucleotide SE
c2367	9.4	12.9	13	1	ABF06774	Oligonucleotide SE
c2368	9.4	12.9	13	1	ABF06775	Oligonucleotide SE
c2369	9.4	12.9	13	1	ABC57985	Oligonucleotide SE
c2370	9.4	12.9	13	1	ABC08882	Oligonucleotide SE
c2371	9.4	12.9	13	1	ABC11858	Oligonucleotide SE
c2372	9.4	12.9	13	1	ABC36332	Oligonucleotide SE
c2373	9.4	12.9	13	1	ABC36333	Oligonucleotide SE
c2374	9.4	12.9	13	1	ABC88572	Oligonucleotide SE
c2375	9.4	12.9	13	1	ABC14557	Oligonucleotide SE
c2376	9.4	12.9	13	1	ABC63714	Oligonucleotide SE
c2377	9.4	12.9	13	1	ABC16201	Oligonucleotide SE
c2378	9.4	12.9	13	1	ABC66732	Oligonucleotide SE
c2379	9.4	12.9	13	1	ABF26356	Oligonucleotide SE
c2380	9.4	12.9	13	1	ABF31638	Oligonucleotide SE
c2381	9.4	12.9	13	1	ABF31787	Oligonucleotide SE
c2382	9.4	12.9	13	1	ABF36952	Oligonucleotide SE
c2383	9.4	12.9	13	1	ABH18281	Oligonucleotide SE
c2384	9.4	12.9	13	1	ABH18709	Oligonucleotide SE
c2385	9.4	12.9	13	1	ABF43684	Oligonucleotide SE
c2386	9.4	12.9	13	1	ABH20302	Oligonucleotide SE
c2387	9.4	12.9	13	1	ABF48526	Oligonucleotide SE
c2388	9.4	12.9	13	1	ABF99599	Oligonucleotide SE
c2389	9.4	12.9	13	1	ABH26157	Oligonucleotide SE
c2390	9.4	12.9	13	1	ABH02534	Oligonucleotide SE
c2391	9.4	12.9	13	1	ABF53197	Oligonucleotide SE
c2392	9.4	12.9	13	1	ABF84016	Oligonucleotide SE
c2393	9.4	12.9	13	1	ABH37215	Oligonucleotide SE
c2394	9.4	12.9	13	1	ABF63911	Oligonucleotide SE
c2395	9.4	12.9	13	1	ABF91551	Oligonucleotide SE
c2396	9.4	12.9	13	1	ABH41756	Oligonucleotide SE
c2397	9.4	12.9	13	1	ABH46224	Oligonucleotide SE
c2398	9.4	12.9	13	1	ABH51302	Oligonucleotide SE
c2399	9.4	12.9	13	1	ABH53899	Oligonucleotide SE
c2400	9.4	12.9	13	1	ABH57301	Oligonucleotide SE
c2401	9.4	12.9	13	1	ABH65662	Oligonucleotide SE
c2402	9.4	12.9	13	1	ABC92838	Oligonucleotide SE
c2403	9.4	12.9	13	1	ABC68201	Oligonucleotide SE
c2404	9.4	12.9	13	1	ABC22206	Oligonucleotide SE
c2405	9.4	12.9	13	1	ABC97648	Oligonucleotide SE
c2406	9.4	12.9	13	1	ABC76020	Oligonucleotide SE
c2407	9.4	12.9	13	1	ABF01246	Oligonucleotide SE
c2408	9.4	12.9	13	1	ABC76272	Oligonucleotide SE
c2409	9.4	12.9	13	1	ABC51406	Oligonucleotide SE
c2410	9.4	12.9	13	1	ABC76825	Oligonucleotide SE
c2411	9.4	12.9	13	1	ABF03499	Oligonucleotide SE
c2412	9.4	12.9	13	1	ABF03755	Oligonucleotide SE
c2413	9.4	12.9	13	1	ABC29149	Oligonucleotide SE
c2414	9.4	12.9	13	1	ABC54213	Oligonucleotide SE
c2415	9.4	12.9	13	1	ABF79371	Oligonucleotide SE
c2416	9.4	12.9	13	1	ABF06323	Oligonucleotide SE
c2417	9.4	12.9	13	1	ABC10379	Oligonucleotide SE
c2418	9.4	12.9	13	1	ABC11857	Oligonucleotide SE
c2419	9.4	12.9	13	1	ABC12222	Oligonucleotide SE
c2420	9.4	12.9	13	1	ABC86656	Oligonucleotide SE
c2421	9.4	12.9	13	1	ABF24039	Oligonucleotide SE
c2422	9.4	12.9	13	1	ABF25461	Oligonucleotide SE
c2423	9.4	12.9	13	1	ABF32542	Oligonucleotide SE
c2424	9.4	12.9	13	1	ABF42385	Oligonucleotide SE
c2425	9.4	12.9	13	1	ABF43102	Oligonucleotide SE
c2426	9.4	12.9	13	1	ABF93271	Oligonucleotide SE
c2427	9.4	12.9	13	1	ABH20303	Oligonucleotide SE
c2428	9.4	12.9	13	1	ABF95997	Oligonucleotide SE
c2429	9.4	12.9	13	1	ABF72080	Oligonucleotide SE
c2430	9.4	12.9	13	1	ABF48210	Oligonucleotide SE
c2431	9.4	12.9	13	1	ABF73485	Oligonucleotide SE
c2432	9.4	12.9	13	1	ABF48527	Oligonucleotide SE
c2433	9.4	12.9	13	1	ABH28961	Oligonucleotide SE
c2434	9.4	12.9	13	1	ABH27292	Oligonucleotide SE
c2435	9.4	12.9	13	1	ABH27853	Oligonucleotide SE
c2436	9.4	12.9	13	1	ABH03115	Oligonucleotide SE
c2437	9.4	12.9	13	1	ABH28111	Oligonucleotide SE
c2438	9.4	12.9	13	1	ABH29276	Oligonucleotide SE
c2439	9.4	12.9	13	1	ABH29277	Oligonucleotide SE
c2440	9.4	12.9	13	1	ABH07784	Oligonucleotide SE
c2441	9.4	12.9	13	1	ABF57798	Oligonucleotide SE
c2442	9.4	12.9	13	1	ABF58093	Oligonucleotide SE

2443	9.4	12.9	13	1	ABF85688	Oligonucleotide SE	2516	9.2	12.6	14	1	AAV11925	Hepatocyte growth
2444	9.4	12.9	13	1	ABH11657	Oligonucleotide SE	c2517	9.2	12.6	14	1	AAV11924	Hepatocyte growth
2445	9.4	12.9	13	1	ABH12347	Oligonucleotide SE	2518	9.2	12.6	14	1	AAV97202	Potato citrate syn
2446	9.4	12.9	13	1	ABH14482	Oligonucleotide SE	c2519	9.2	12.6	14	1	AAV61182	Human chromosome a
2447	9.4	12.9	13	1	ABH16020	Oligonucleotide SE	c2520	9.2	12.6	14	1	AAV61148	Human chromosome a
2448	9.4	12.9	13	1	ABH41300	Oligonucleotide SE	2521	9.2	12.6	14	1	AAV14931	Triple helix third
2449	9.4	12.9	13	1	ABH41555	Oligonucleotide SE	c2522	9.2	12.6	14	1	AAV14710	Triple helix third
2450	9.4	12.9	13	1	ABH43935	Oligonucleotide SE	2523	9.2	12.6	14	1	AAV14691	Triple helix third
2451	9.4	12.9	13	1	ABH53896	Oligonucleotide SE	2524	9.2	12.6	14	1	AAV14691	Human antisense ol
2452	9.4	12.9	13	1	ABH58822	Oligonucleotide SE	c2525	9.2	12.6	14	1	AAV07946	RNA oligonucleotid
2453	9.4	12.9	13	1	ABH60733	Oligonucleotide SE	2526	9.2	12.6	14	1	AAV07946	Novel DNA chip man
2454	9.4	12.9	13	1	ABC42528	Oligonucleotide SE	c2527	9.2	12.6	14	1	AAV42800	Ribozyme complex R
2455	9.4	12.9	13	1	ABC95533	Oligonucleotide SE	2528	9.2	12.6	14	1	AAV50500	Yak milk protein g
2456	9.4	12.9	13	1	ABC99599	Oligonucleotide SE	c2529	9.2	12.6	14	1	AAV50500	Retinoblastoma mut
2457	9.4	12.9	13	1	ABF02161	Oligonucleotide SE	2530	9.2	12.6	17	1	ABA77713	Retinoblastoma mut
2458	9.4	12.9	13	1	ABC27331	Oligonucleotide SE	c2531	9	12.3	10	1	AAV96587	HIV-1 NL4-3 nef ge
2459	9.4	12.9	13	1	ABC02847	Oligonucleotide SE	c2532	9	12.3	10	1	AAV96586	HIV-1 NL4-3 nef ge
2460	9.4	12.9	13	1	ABC02901	Oligonucleotide SE	c2533	9	12.3	10	1	AAV08716	Potential NF-AT co
2461	9.4	12.9	13	1	ABC30462	Oligonucleotide SE	c2534	9	12.3	10	1	AAV78093	Human dendritic ce
2462	9.4	12.9	13	1	ABC05985	Oligonucleotide SE	c2535	9	12.3	10	1	AAV78898	Human dendritic ce
2463	9.4	12.9	13	1	ABC81438	Oligonucleotide SE	2536	9	12.3	10	1	AAV79067	Human dendritic ce
2464	9.4	12.9	13	1	ABC58137	Oligonucleotide SE	c2537	9	12.3	10	1	AAV81571	Metastatic breast
2465	9.4	12.9	13	1	ABC09267	Oligonucleotide SE	2538	9	12.3	10	1	AAV81571	Metastatic breast
2466	9.4	12.9	13	1	ABC85620	Oligonucleotide SE	c2539	9	12.3	10	1	AAV81571	Metastatic breast
2467	9.4	12.9	13	1	ABC85826	Oligonucleotide SE	2540	9	12.3	10	1	AAV81571	Metastatic breast
2468	9.4	12.9	13	1	ABC37800	Oligonucleotide SE	2541	9	12.3	10	1	AAV81571	Metastatic breast
2469	9.4	12.9	13	1	ABC39738	Oligonucleotide SE	2542	9	12.3	10	1	AAV81571	Metastatic breast
2470	9.4	12.9	13	1	ABC40251	Oligonucleotide SE	c2543	9	12.3	10	1	AAV81571	Metastatic breast
2471	9.4	12.9	13	1	ABF15751	Oligonucleotide SE	c2544	9	12.3	10	1	AAV81571	Metastatic breast
2472	9.4	12.9	13	1	ABC42114	Oligonucleotide SE	c2545	9	12.3	10	1	AAV81571	Metastatic breast
2473	9.4	12.9	13	1	ABC66733	Oligonucleotide SE	c2546	9	12.3	10	1	AAV81571	Metastatic breast
2474	9.4	12.9	13	1	ABF19574	Oligonucleotide SE	c2547	9	12.3	10	1	AAV81571	Metastatic breast
2475	9.4	12.9	13	1	ABF20582	Oligonucleotide SE	c2548	9	12.3	10	1	AAV81571	Metastatic breast
2476	9.4	12.9	13	1	ABF25462	Oligonucleotide SE	c2549	9	12.3	10	1	AAV81571	Metastatic breast
2477	9.4	12.9	13	1	ABF28735	Oligonucleotide SE	2550	9	12.3	10	1	AAV81571	Metastatic breast
2478	9.4	12.9	13	1	ABF32538	Oligonucleotide SE	c2551	9	12.3	10	1	AAV81571	Metastatic breast
2479	9.4	12.9	13	1	ABF32539	Oligonucleotide SE	c2552	9	12.3	10	1	AAV81571	Metastatic breast
2480	9.4	12.9	13	1	ABF42386	Oligonucleotide SE	c2553	9	12.3	10	1	AAV81571	Metastatic breast
2481	9.4	12.9	13	1	ABF42387	Oligonucleotide SE	c2554	9	12.3	10	1	AAV81571	Metastatic breast
2482	9.4	12.9	13	1	ABH18280	Oligonucleotide SE	2555	9	12.3	10	1	AAV81571	Metastatic breast
2483	9.4	12.9	13	1	ABF93666	Oligonucleotide SE	c2556	9	12.3	10	1	AAV81571	Metastatic breast
2484	9.4	12.9	13	1	ABF48211	Oligonucleotide SE	2557	9	12.3	10	1	AAV81571	Metastatic breast
2485	9.4	12.9	13	1	ABH25103	Oligonucleotide SE	c2558	9	12.3	10	1	AAV81571	Metastatic breast
2486	9.4	12.9	13	1	ABH01945	Oligonucleotide SE	c2559	9	12.3	10	1	AAV81571	Metastatic breast
2487	9.4	12.9	13	1	ABH02045	Oligonucleotide SE	c2560	9	12.3	10	1	AAV81571	Metastatic breast
2488	9.4	12.9	13	1	ABH27351	Oligonucleotide SE	c2561	9	12.3	10	1	AAV81571	Metastatic breast
2489	9.4	12.9	13	1	ABH02910	Oligonucleotide SE	2562	9	12.3	10	1	AAV81571	Metastatic breast
2490	9.4	12.9	13	1	ABH03289	Oligonucleotide SE	c2563	9	12.3	10	1	AAV81571	Metastatic breast
2491	9.4	12.9	13	1	ABH04896	Oligonucleotide SE	c2564	9	12.3	10	1	AAV81571	Metastatic breast
2492	9.4	12.9	13	1	ABH05321	Oligonucleotide SE	c2565	9	12.3	10	1	AAV81571	Metastatic breast
2493	9.4	12.9	13	1	ABH07785	Oligonucleotide SE	c2566	9	12.3	10	1	AAV81571	Metastatic breast
2494	9.4	12.9	13	1	ABH09785	Oligonucleotide SE	c2567	9	12.3	10	1	AAV81571	Metastatic breast
2495	9.4	12.9	13	1	ABH36776	Oligonucleotide SE	2568	9	12.3	10	1	AAV81571	Metastatic breast
2496	9.4	12.9	13	1	ABF61733	Oligonucleotide SE	c2569	9	12.3	10	1	AAV81571	Metastatic breast
2497	9.4	12.9	13	1	ABF62775	Oligonucleotide SE	2570	9	12.3	10	1	AAV81571	Metastatic breast
2498	9.4	12.9	13	1	ABH13481	Oligonucleotide SE	c2571	9	12.3	10	1	AAV81571	Metastatic breast
2499	9.4	12.9	13	1	ABF63724	Oligonucleotide SE	2572	9	12.3	10	1	AAV81571	Metastatic breast
2500	9.4	12.9	13	1	ABH41253	Oligonucleotide SE	c2573	9	12.3	10	1	AAV81571	Metastatic breast
2501	9.4	12.9	13	1	ABH47704	Oligonucleotide SE	c2574	9	12.3	10	1	AAV81571	Metastatic breast
2502	9.4	12.9	13	1	ABH60732	Oligonucleotide SE	c2575	9	12.3	10	1	AAV81571	Metastatic breast
2503	9.4	12.9	13	1	ABZ72849	Oligonucleotide SE	c2576	9	12.3	10	1	AAV81571	Metastatic breast
2504	9.4	12.9	13	1	ACD56504	Oligonucleotide SE	2577	9	12.3	10	1	AAV81571	Metastatic breast
2505	9.4	12.9	13	1	AAV71348	Oligonucleotide SE	c2578	9	12.3	10	1	AAV81571	Metastatic breast
2506	9.4	12.9	13	1	AAV49069	Oligonucleotide SE	c2579	9	12.3	10	1	AAV81571	Metastatic breast
2507	9.4	12.9	13	1	AAV14711	Oligonucleotide SE	c2580	9	12.3	10	1	AAV81571	Metastatic breast
2508	9.4	12.9	13	1	AAV65640	Oligonucleotide SE	c2581	9	12.3	10	1	AAV81571	Metastatic breast
2509	9.4	12.9	13	1	AAV37592	Oligonucleotide SE	c2582	9	12.3	10	1	AAV81571	Metastatic breast
2510	9.4	12.9	13	1	AAV59891	Oligonucleotide SE	c2583	9	12.3	10	1	AAV81571	Metastatic breast
2511	9.4	12.9	13	1	AAV15463	Oligonucleotide SE	c2584	9	12.3	10	1	AAV81571	Metastatic breast
2512	9.4	12.9	13	1	ABL42252	Oligonucleotide SE	c2585	9	12.3	10	1	AAV81571	Metastatic breast
2513	9.4	12.9	13	1	AAO10579	Oligonucleotide SE	c2586	9	12.3	10	1	AAV81571	Metastatic breast
2514	9.2	12.6	14	1	AAO78469	Oligonucleotide SE	c2587	9	12.3	10	1	AAV81571	Metastatic breast
2515	9.2	12.6	14	1	AAV06882	Oligonucleotide SE	c2588	9	12.3	10	1	AAV81571	Metastatic breast

One from an array

2589	9	12.3	12	1	AAx85598	Fragment of the po	c2662	9	12.3	12	1	ABI64177	Oligonucleotide pr
2590	9	12.3	12	1	AAAS5929	Adapter linker nuc	2663	9	12.3	12	1	ABH73634	Oligonucleotide pr
2591	9	12.3	12	1	AAAY3441	Linker JAL1. Sacc	c2664	9	12.3	12	1	ABH74794	Oligonucleotide pr
c2592	9	12.3	12	1	ABH95716	Oligonucleotide pr	c2665	9	12.3	12	1	ABH78946	Oligonucleotide pr
2593	9	12.3	12	1	ABH90779	Oligonucleotide pr	2666	9	12.3	12	1	ABI08267	Oligonucleotide pr
c2594	9	12.3	12	1	ABI50614	Oligonucleotide pr	c2667	9	12.3	12	1	ABI40627	Oligonucleotide pr
2595	9	12.3	12	1	ABI50922	Oligonucleotide pr	c2668	9	12.3	12	1	ABI15627	Oligonucleotide pr
2596	9	12.3	12	1	ABI72996	Oligonucleotide pr	c2669	9	12.3	12	1	ABI44988	Oligonucleotide pr
c2597	9	12.3	12	1	ABI74532	Oligonucleotide pr	2670	9	12.3	12	1	ABI67670	Oligonucleotide pr
c2598	9	12.3	12	1	ABI63362	Oligonucleotide pr	2671	9	12.3	12	1	ABI62149	Oligonucleotide pr
2599	9	12.3	12	1	ABI77757	Oligonucleotide pr	2672	9	12.3	12	1	ABI63807	Oligonucleotide pr
2600	9	12.3	12	1	ABI79905	Oligonucleotide pr	2673	9	12.3	12	1	ABI18422	Oligonucleotide pr
2601	9	12.3	12	1	ABI81603	Oligonucleotide pr	2674	9	12.3	12	1	ABI20296	Oligonucleotide pr
2602	9	12.3	12	1	ABI19581	Oligonucleotide pr	2675	9	12.3	12	1	ABH96179	Oligonucleotide pr
c2603	9	12.3	12	1	ABH74720	Oligonucleotide pr	2676	9	12.3	12	1	ABH73353	Oligonucleotide pr
c2604	9	12.3	12	1	ABI26746	Oligonucleotide pr	c2677	9	12.3	12	1	ABI01165	Oligonucleotide pr
2605	9	12.3	12	1	ABI01684	Oligonucleotide pr	2678	9	12.3	12	1	ABI02686	Oligonucleotide pr
2606	9	12.3	12	1	ABI02367	Oligonucleotide pr	c2679	9	12.3	12	1	ABH85113	Oligonucleotide pr
c2607	9	12.3	12	1	ABI04593	Oligonucleotide pr	2680	9	12.3	12	1	ABI13522	Oligonucleotide pr
2608	9	12.3	12	1	ABH86165	Oligonucleotide pr	2681	9	12.3	12	1	ABI42192	Oligonucleotide pr
2609	9	12.3	12	1	ABH86427	Oligonucleotide pr	2682	9	12.3	12	1	ABI46190	Oligonucleotide pr
c2610	9	12.3	12	1	ABI45905	Oligonucleotide pr	2683	9	12.3	12	1	ABI47523	Oligonucleotide pr
2611	9	12.3	12	1	ABI48277	Oligonucleotide pr	c2684	9	12.3	12	1	ABI170334	Oligonucleotide pr
c2612	9	12.3	12	1	ABI67671	Oligonucleotide pr	2685	9	12.3	12	1	ABI74444	Oligonucleotide pr
c2613	9	12.3	12	1	ABI54939	Oligonucleotide pr	2686	9	12.3	12	1	ABI64490	Oligonucleotide pr
2614	9	12.3	12	1	ABI57288	Oligonucleotide pr	2687	9	12.3	12	1	ABI66296	Oligonucleotide pr
c2615	9	12.3	12	1	ABI71651	Oligonucleotide pr	c2688	9	12.3	12	1	ABH94348	Oligonucleotide pr
2616	9	12.3	12	1	ABI77068	Oligonucleotide pr	c2689	9	12.3	12	1	ABH73162	Oligonucleotide pr
2617	9	12.3	12	1	ABI77457	Oligonucleotide pr	c2690	9	12.3	12	1	ABH82797	Oligonucleotide pr
2618	9	12.3	12	1	ABH94731	Oligonucleotide pr	c2691	9	12.3	12	1	ABI11373	Oligonucleotide pr
c2619	9	12.3	12	1	ABH70543	Oligonucleotide pr	c2692	9	12.3	12	1	ABI50994	Oligonucleotide pr
2620	9	12.3	12	1	ABH78558	Oligonucleotide pr	c2693	9	12.3	12	1	ABI69632	Oligonucleotide pr
c2621	9	12.3	12	1	ABI03734	Oligonucleotide pr	2694	9	12.3	12	1	ABI78614	Oligonucleotide pr
c2622	9	12.3	12	1	ABI04695	Oligonucleotide pr	c2695	9	12.3	12	1	ABI66615	Oligonucleotide pr
c2623	9	12.3	12	1	ABH83878	Oligonucleotide pr	2696	9	12.3	12	1	ABI17925	Oligonucleotide pr
2624	9	12.3	12	1	ABI35233	Oligonucleotide pr	2697	9	12.3	12	1	ABH69850	Oligonucleotide pr
2625	9	12.3	12	1	ABI15017	Oligonucleotide pr	c2698	9	12.3	12	1	ABH77868	Oligonucleotide pr
c2626	9	12.3	12	1	ABI42550	Oligonucleotide pr	c2699	9	12.3	12	1	ABI06647	Oligonucleotide pr
2627	9	12.3	12	1	ABI67406	Oligonucleotide pr	2700	9	12.3	12	1	ABI32262	Oligonucleotide pr
c2628	9	12.3	12	1	ABI67441	Oligonucleotide pr	2701	9	12.3	12	1	ABI12529	Oligonucleotide pr
c2629	9	12.3	12	1	ABI58942	Oligonucleotide pr	c2702	9	12.3	12	1	ABH88958	Oligonucleotide pr
2630	9	12.3	12	1	ABI81717	Oligonucleotide pr	2703	9	12.3	12	1	ABI41480	Oligonucleotide pr
c2631	9	12.3	12	1	ABI19671	Oligonucleotide pr	c2704	9	12.3	12	1	ABH91563	Oligonucleotide pr
c2632	9	12.3	12	1	ABI04178	Oligonucleotide pr	2705	9	12.3	12	1	ABI42422	Oligonucleotide pr
c2633	9	12.3	12	1	ABI04592	Oligonucleotide pr	2706	9	12.3	12	1	ABI44935	Oligonucleotide pr
c2634	9	12.3	12	1	ABI39603	Oligonucleotide pr	c2707	9	12.3	12	1	ABI49477	Oligonucleotide pr
c2635	9	12.3	12	1	ABI40616	Oligonucleotide pr	c2708	9	12.3	12	1	ABI71445	Oligonucleotide pr
c2636	9	12.3	12	1	ABH91031	Oligonucleotide pr	2709	9	12.3	12	1	ABI72995	Oligonucleotide pr
c2637	9	12.3	12	1	ABI53904	Oligonucleotide pr	2710	9	12.3	12	1	ABH98656	Oligonucleotide pr
2638	9	12.3	12	1	ABI64374	Oligonucleotide pr	c2711	9	12.3	12	1	ABI01426	Oligonucleotide pr
2639	9	12.3	12	1	ABH67943	Oligonucleotide pr	c2712	9	12.3	12	1	ABI27240	Oligonucleotide pr
2640	9	12.3	12	1	ABH71914	Oligonucleotide pr	c2713	9	12.3	12	1	ABH77500	Oligonucleotide pr
c2641	9	12.3	12	1	ABI03735	Oligonucleotide pr	c2714	9	12.3	12	1	ABH78286	Oligonucleotide pr
2642	9	12.3	12	1	ABH79870	Oligonucleotide pr	2715	9	12.3	12	1	ABI29842	Oligonucleotide pr
c2643	9	12.3	12	1	ABI35849	Oligonucleotide pr	2716	9	12.3	12	1	ABH79871	Oligonucleotide pr
2644	9	12.3	12	1	ABI51836	Oligonucleotide pr	c2717	9	12.3	12	1	ABH87718	Oligonucleotide pr
c2645	9	12.3	12	1	ABI69523	Oligonucleotide pr	2718	9	12.3	12	1	ABI37858	Oligonucleotide pr
c2646	9	12.3	12	1	ABI56686	Oligonucleotide pr	c2719	9	12.3	12	1	ABI44974	Oligonucleotide pr
c2647	9	12.3	12	1	ABI70789	Oligonucleotide pr	2720	9	12.3	12	1	ABI53048	Oligonucleotide pr
2648	9	12.3	12	1	ABI60817	Oligonucleotide pr	2721	9	12.3	12	1	ABI55373	Oligonucleotide pr
c2649	9	12.3	12	1	ABI75739	Oligonucleotide pr	c2722	9	12.3	12	1	ABI61962	Oligonucleotide pr
c2650	9	12.3	12	1	ABI76254	Oligonucleotide pr	2723	9	12.3	12	1	ABH93614	Oligonucleotide pr
c2651	9	12.3	12	1	ABI66743	Oligonucleotide pr	c2724	9	12.3	12	1	ABH95642	Oligonucleotide pr
2652	9	12.3	12	1	ABI17700	Oligonucleotide pr	2725	9	12.3	12	1	ABI20773	Oligonucleotide pr
2653	9	12.3	12	1	ABH70316	Oligonucleotide pr	c2726	9	12.3	12	1	ABI27241	Oligonucleotide pr
2654	9	12.3	12	1	ABH77224	Oligonucleotide pr	c2727	9	12.3	12	1	ABI33479	Oligonucleotide pr
2655	9	12.3	12	1	ABH78593	Oligonucleotide pr	2728	9	12.3	12	1	ABH84492	Oligonucleotide pr
c2656	9	12.3	12	1	ABI04774	Oligonucleotide pr	c2729	9	12.3	12	1	ABI36252	Oligonucleotide pr
2657	9	12.3	12	1	ABI34418	Oligonucleotide pr	2730	9	12.3	12	1	ABH86163	Oligonucleotide pr
c2658	9	12.3	12	1	ABI12055	Oligonucleotide pr	2731	9	12.3	12	1	ABH87645	Oligonucleotide pr
2659	9	12.3	12	1	ABH90122	Oligonucleotide pr	2732	9	12.3	12	1	ABI58542	Oligonucleotide pr
2660	9	12.3	12	1	ABI68285	Oligonucleotide pr	2733	9	12.3	12	1	ABI80610	Oligonucleotide pr
c2661	9	12.3	12	1	ABI57929	Oligonucleotide pr	c2734	9	12.3	12	1	ABI17473	Oligonucleotide pr

2735	9	12.3	12	1	ABI20578	Oligonucleotide pr	c2808	9	12.3	13	1	ABH62984	Oligonucleotide SE
2736	9	12.3	12	1	ABI23817	Oligonucleotide pr	2809	9	12.3	13	1	ABH64321	Oligonucleotide SE
2737	9	12.3	12	1	ABI12531	Oligonucleotide pr	2810	9	12.3	13	1	ABC42332	Oligonucleotide SE
2738	9	12.3	12	1	ABI39602	Oligonucleotide pr	c2811	9	12.3	13	1	ABC94238	Oligonucleotide SE
2739	9	12.3	12	1	ABI52286	Oligonucleotide pr	c2812	9	12.3	13	1	ABC94527	Oligonucleotide SE
2740	9	12.3	12	1	ABI75107	Oligonucleotide pr	2813	9	12.3	13	1	ABC95566	Oligonucleotide SE
2741	9	12.3	12	1	ABI77250	Oligonucleotide pr	c2814	9	12.3	13	1	ABC95567	Oligonucleotide SE
2742	9	12.3	12	1	ABI79569	Oligonucleotide pr	c2815	9	12.3	13	1	ABC28027	Oligonucleotide SE
2743	9	12.3	12	1	ABI80054	Oligonucleotide pr	c2816	9	12.3	13	1	ABC54407	Oligonucleotide SE
2744	9	12.3	12	1	ABI80285	Oligonucleotide pr	2817	9	12.3	13	1	ABC05358	Oligonucleotide SE
2745	9	12.3	12	1	ABI18521	Oligonucleotide pr	2818	9	12.3	13	1	ABF07561	Oligonucleotide SE
2746	9	12.3	12	1	ABH95794	Oligonucleotide pr	c2819	9	12.3	13	1	ABF08512	Oligonucleotide SE
2747	9	12.3	12	1	ABH71477	Oligonucleotide pr	2820	9	12.3	13	1	ABC34442	Oligonucleotide SE
2748	9	12.3	12	1	ABH98680	Oligonucleotide pr	2821	9	12.3	13	1	ABC62783	Oligonucleotide SE
2749	9	12.3	12	1	ABH83505	Oligonucleotide pr	c2822	9	12.3	13	1	ABC63293	Oligonucleotide SE
2750	9	12.3	12	1	ABH90123	Oligonucleotide pr	2823	9	12.3	13	1	ABF14655	Oligonucleotide SE
2751	9	12.3	12	1	ABI55552	Oligonucleotide pr	2824	9	12.3	13	1	ABF15154	Oligonucleotide SE
2752	9	12.3	12	1	ABI76585	Oligonucleotide pr	c2825	9	12.3	13	1	ABF16824	Oligonucleotide SE
2753	9	12.3	12	1	ABH81153	Oligonucleotide pr	c2826	9	12.3	13	1	ABF16828	Oligonucleotide SE
2754	9	12.3	12	1	ABH68821	Oligonucleotide pr	2827	9	12.3	13	1	ABF27228	Oligonucleotide SE
2755	9	12.3	12	1	ABH04504	Oligonucleotide pr	c2828	9	12.3	13	1	ABF30874	Oligonucleotide SE
2756	9	12.3	12	1	ABH81368	Oligonucleotide pr	2829	9	12.3	13	1	ABF32752	Oligonucleotide SE
2757	9	12.3	12	1	ABH47930	Oligonucleotide pr	c2830	9	12.3	13	1	ABF40352	Oligonucleotide SE
2758	9	12.3	12	1	ABI54931	Oligonucleotide pr	2831	9	12.3	13	1	ABF67405	Oligonucleotide SE
2759	9	12.3	12	1	ABI60048	Oligonucleotide pr	c2832	9	12.3	13	1	ABH18783	Oligonucleotide SE
2760	9	12.3	12	1	ABI81772	Oligonucleotide pr	2833	9	12.3	13	1	ABF69193	Oligonucleotide SE
2761	9	12.3	12	1	ABI119954	Oligonucleotide pr	2834	9	12.3	13	1	ABF96352	Oligonucleotide SE
2762	9	12.3	12	1	ABI21828	Oligonucleotide pr	2835	9	12.3	13	1	ABF97054	Oligonucleotide SE
2763	9	12.3	12	1	ABI25990	Oligonucleotide pr	2836	9	12.3	13	1	ABH22592	Oligonucleotide SE
2764	9	12.3	12	1	ABH77554	Oligonucleotide pr	c2837	9	12.3	13	1	ABF74096	Oligonucleotide SE
2765	9	12.3	12	1	ABI04842	Oligonucleotide pr	2838	9	12.3	13	1	ABF50939	Oligonucleotide SE
2766	9	12.3	12	1	ABI38582	Oligonucleotide pr	2839	9	12.3	13	1	ABF79809	Oligonucleotide SE
2767	9	12.3	12	1	ABI15018	Oligonucleotide pr	c2840	9	12.3	13	1	ABH06811	Oligonucleotide SE
2768	9	12.3	12	1	ABI44975	Oligonucleotide pr	c2841	9	12.3	13	1	ABF85211	Oligonucleotide SE
2769	9	12.3	12	1	ABI53781	Oligonucleotide pr	c2842	9	12.3	13	1	ABF87395	Oligonucleotide SE
2770	9	12.3	12	1	ABI57395	Oligonucleotide pr	c2843	9	12.3	13	1	ABF64049	Oligonucleotide SE
2771	9	12.3	12	1	ABI66046	Oligonucleotide pr	2844	9	12.3	13	1	ABF92043	Oligonucleotide SE
2772	9	12.3	12	1	ABI81849	Oligonucleotide pr	c2845	9	12.3	13	1	ABH45813	Oligonucleotide SE
2773	9	12.3	12	1	AD45532	JAL1 linker DNA us	2846	9	12.3	13	1	ABH57916	Oligonucleotide SE
2774	9	12.3	12	1	AD24746	Human NAT2 mutant	2847	9	12.3	13	1	ABH61170	Oligonucleotide SE
2775	9	12.3	13	1	AA704326	Sense strand of se	2848	9	12.3	13	1	ABH61416	Oligonucleotide SE
2776	9	12.3	13	1	AAV41080	Primer AML1EV12820	c2849	9	12.3	13	1	ABC43717	Oligonucleotide SE
2777	9	12.3	13	1	AAV13242	Probe used in DNA	2850	9	12.3	13	1	ABC73752	Oligonucleotide SE
2778	9	12.3	13	1	AAV34128	Oligonucleotide #2	c2851	9	12.3	13	1	ABC74363	Oligonucleotide SE
2779	9	12.3	13	1	AAV00579	Probe (B) for dete	2852	9	12.3	13	1	ABC32864	Oligonucleotide SE
2780	9	12.3	13	1	AAZ92440	Rhizoctonia sp. PC	c2853	9	12.3	13	1	ABC84875	Oligonucleotide SE
2781	9	12.3	13	1	AAZ65642	Immunosuppressant	2854	9	12.3	13	1	ABF10144	Oligonucleotide SE
2782	9	12.3	13	1	ABC42713	Oligonucleotide SE	c2855	9	12.3	13	1	ABC37554	Oligonucleotide SE
2783	9	12.3	13	1	ABC68634	Oligonucleotide SE	2856	9	12.3	13	1	ABF15968	Oligonucleotide SE
2784	9	12.3	13	1	ABC72992	Oligonucleotide SE	2857	9	12.3	13	1	ABF27200	Oligonucleotide SE
2785	9	12.3	13	1	ABC06587	Oligonucleotide SE	2858	9	12.3	13	1	ABF31469	Oligonucleotide SE
2786	9	12.3	13	1	ABC57583	Oligonucleotide SE	2859	9	12.3	13	1	ABF33098	Oligonucleotide SE
2787	9	12.3	13	1	ABC83127	Oligonucleotide SE	c2860	9	12.3	13	1	ABF40970	Oligonucleotide SE
2788	9	12.3	13	1	ABF09982	Oligonucleotide SE	c2861	9	12.3	13	1	ABF50637	Oligonucleotide SE
2789	9	12.3	13	1	ABC86570	Oligonucleotide SE	c2862	9	12.3	13	1	ABF53615	Oligonucleotide SE
2790	9	12.3	13	1	ABC63977	Oligonucleotide SE	c2863	9	12.3	13	1	ABF37379	Oligonucleotide SE
2791	9	12.3	13	1	ABF16745	Oligonucleotide SE	2864	9	12.3	13	1	ABP87390	Oligonucleotide SE
2792	9	12.3	13	1	ABF31468	Oligonucleotide SE	c2865	9	12.3	13	1	ABH53730	Oligonucleotide SE
2793	9	12.3	13	1	ABF32753	Oligonucleotide SE	c2866	9	12.3	13	1	ABH56164	Oligonucleotide SE
2794	9	12.3	13	1	ABF42121	Oligonucleotide SE	2867	9	12.3	13	1	ABC94239	Oligonucleotide SE
2795	9	12.3	13	1	ABF42133	Oligonucleotide SE	2868	9	12.3	13	1	ABC72152	Oligonucleotide SE
2796	9	12.3	13	1	ABF42529	Oligonucleotide SE	c2869	9	12.3	13	1	ABC73753	Oligonucleotide SE
2797	9	12.3	13	1	ABF69028	Oligonucleotide SE	2870	9	12.3	13	1	ABC24388	Oligonucleotide SE
2798	9	12.3	13	1	ABF69029	Oligonucleotide SE	2871	9	12.3	13	1	ABC26261	Oligonucleotide SE
2799	9	12.3	13	1	ABF99611	Oligonucleotide SE	2872	9	12.3	13	1	ABC58871	Oligonucleotide SE
2800	9	12.3	13	1	ABF50897	Oligonucleotide SE	2873	9	12.3	13	1	ABC58963	Oligonucleotide SE
2801	9	12.3	13	1	ABF54252	Oligonucleotide SE	2874	9	12.3	13	1	ABC10608	Oligonucleotide SE
2802	9	12.3	13	1	ABF55774	Oligonucleotide SE	2875	9	12.3	13	1	ABC11794	Oligonucleotide SE
2803	9	12.3	13	1	ABF57869	Oligonucleotide SE	2876	9	12.3	13	1	ABC61054	Oligonucleotide SE
2804	9	12.3	13	1	ABH33439	Oligonucleotide SE	2877	9	12.3	13	1	ABF11491	Oligonucleotide SE
2805	9	12.3	13	1	ABH12772	Oligonucleotide SE	2878	9	12.3	13	1	ABC86571	Oligonucleotide SE
2806	9	12.3	13	1	ABF64048	Oligonucleotide SE	c2879	9	12.3	13	1	ABC13536	Oligonucleotide SE
2807	9	12.3	13	1	ABF92042	Oligonucleotide SE	c2880	9	12.3	13	1	ABC65875	Oligonucleotide SE

c2881	9	12.3	13	1	ABF18548	Oligonucleotide SE	2954	9	12.3	13	1	ABF87316	Oligonucleotide SE
c2882	9	12.3	13	1	ABF27201	Oligonucleotide SE	c2955	9	12.3	13	1	ABF63756	Oligonucleotide SE
c2883	9	12.3	13	1	ABF33096	Oligonucleotide SE	2956	9	12.3	13	1	ABH14429	Oligonucleotide SE
c2884	9	12.3	13	1	ABF42120	Oligonucleotide SE	c2957	9	12.3	13	1	ABF64672	Oligonucleotide SE
c2885	9	12.3	13	1	ABH20251	Oligonucleotide SE	c2958	9	12.3	13	1	ABF65948	Oligonucleotide SE
c2886	9	12.3	13	1	ABH20251	Oligonucleotide SE	2959	9	12.3	13	1	ABH49386	Oligonucleotide SE
c2887	9	12.3	13	1	ABH22111	Oligonucleotide SE	c2960	9	12.3	13	1	ABH61171	Oligonucleotide SE
c2888	9	12.3	13	1	ABF98783	Oligonucleotide SE	c2961	9	12.3	13	1	ABH62479	Oligonucleotide SE
c2889	9	12.3	13	1	ABF99178	Oligonucleotide SE	c2962	9	12.3	13	1	ABC67774	Oligonucleotide SE
c2890	9	12.3	13	1	ABH26995	Oligonucleotide SE	2963	9	12.3	13	1	ABC93386	Oligonucleotide SE
c2891	9	12.3	13	1	ABF78787	Oligonucleotide SE	c2964	9	12.3	13	1	ABC93386	Oligonucleotide SE
c2892	9	12.3	13	1	ABH29133	Oligonucleotide SE	c2965	9	12.3	13	1	ABF02989	Oligonucleotide SE
c2893	9	12.3	13	1	ABF54385	Oligonucleotide SE	2966	9	12.3	13	1	ABC28026	Oligonucleotide SE
c2894	9	12.3	13	1	ABH36950	Oligonucleotide SE	c2967	9	12.3	13	1	ABF10145	Oligonucleotide SE
c2895	9	12.3	13	1	ABF91581	Oligonucleotide SE	c2968	9	12.3	13	1	ABF12492	Oligonucleotide SE
c2896	9	12.3	13	1	ABH48162	Oligonucleotide SE	c2969	9	12.3	13	1	ABC63976	Oligonucleotide SE
c2897	9	12.3	13	1	ABH49387	Oligonucleotide SE	c2970	9	12.3	13	1	ABC64248	Oligonucleotide SE
c2898	9	12.3	13	1	ABH64320	Oligonucleotide SE	2971	9	12.3	13	1	ABC90350	Oligonucleotide SE
c2899	9	12.3	13	1	ABC42712	Oligonucleotide SE	2972	9	12.3	13	1	ABF16744	Oligonucleotide SE
c2900	9	12.3	13	1	ABC68720	Oligonucleotide SE	2973	9	12.3	13	1	ABF16829	Oligonucleotide SE
c2901	9	12.3	13	1	ABC69616	Oligonucleotide SE	2974	9	12.3	13	1	ABF19050	Oligonucleotide SE
c2902	9	12.3	13	1	ABC47613	Oligonucleotide SE	c2975	9	12.3	13	1	ABF19051	Oligonucleotide SE
c2903	9	12.3	13	1	ABC76837	Oligonucleotide SE	2976	9	12.3	13	1	ABF19824	Oligonucleotide SE
c2904	9	12.3	13	1	ABC04536	Oligonucleotide SE	2977	9	12.3	13	1	ABF37770	Oligonucleotide SE
c2905	9	12.3	13	1	ABC079138	Oligonucleotide SE	c2978	9	12.3	13	1	ABF37771	Oligonucleotide SE
c2906	9	12.3	13	1	ABF07560	Oligonucleotide SE	2979	9	12.3	13	1	ABF42132	Oligonucleotide SE
c2907	9	12.3	13	1	ABC57582	Oligonucleotide SE	c2980	9	12.3	13	1	ABF95851	Oligonucleotide SE
c2908	9	12.3	13	1	ABF08513	Oligonucleotide SE	c2981	9	12.3	13	1	ABF46744	Oligonucleotide SE
c2909	9	12.3	13	1	ABF08513	Oligonucleotide SE	c2982	9	12.3	13	1	ABF97553	Oligonucleotide SE
c2910	9	12.3	13	1	ABC58870	Oligonucleotide SE	c2983	9	12.3	13	1	ABH22593	Oligonucleotide SE
c2911	9	12.3	13	1	ABC34443	Oligonucleotide SE	c2984	9	12.3	13	1	ABH26167	Oligonucleotide SE
c2912	9	12.3	13	1	ABC63292	Oligonucleotide SE	c2985	9	12.3	13	1	ABH26994	Oligonucleotide SE
c2913	9	12.3	13	1	ABC14398	Oligonucleotide SE	c2986	9	12.3	13	1	ABF78786	Oligonucleotide SE
c2914	9	12.3	13	1	ABF27229	Oligonucleotide SE	2987	9	12.3	13	1	ABF55296	Oligonucleotide SE
c2915	9	12.3	13	1	ABH18782	Oligonucleotide SE	2988	9	12.3	13	1	ABF58426	Oligonucleotide SE
c2916	9	12.3	13	1	ABF69142	Oligonucleotide SE	2989	9	12.3	13	1	ABF86233	Oligonucleotide SE
c2917	9	12.3	13	1	ABH00055	Oligonucleotide SE	c2990	9	12.3	13	1	ABH13339	Oligonucleotide SE
c2918	9	12.3	13	1	ABF52508	Oligonucleotide SE	c2991	9	12.3	13	1	ABF91390	Oligonucleotide SE
c2919	9	12.3	13	1	ABF55718	Oligonucleotide SE	2992	9	12.3	13	1	ABH57233	Oligonucleotide SE
c2920	9	12.3	13	1	ABF85999	Oligonucleotide SE	2993	9	12.3	13	1	ABH58384	Oligonucleotide SE
c2921	9	12.3	13	1	ABH36951	Oligonucleotide SE	c2994	9	12.3	13	1	ABC69661	Oligonucleotide SE
c2922	9	12.3	13	1	ABH42698	Oligonucleotide SE	c2995	9	12.3	13	1	ABC23823	Oligonucleotide SE
c2923	9	12.3	13	1	ABH45812	Oligonucleotide SE	2996	9	12.3	13	1	ABC74243	Oligonucleotide SE
c2924	9	12.3	13	1	ABH48112	Oligonucleotide SE	c2997	9	12.3	13	1	ABC26053	Oligonucleotide SE
c2925	9	12.3	13	1	ABH49518	Oligonucleotide SE	c2998	9	12.3	13	1	ABC26260	Oligonucleotide SE
c2926	9	12.3	13	1	ABH56165	Oligonucleotide SE	c2999	9	12.3	13	1	ABF01309	Oligonucleotide SE
c2927	9	12.3	13	1	ABH58385	Oligonucleotide SE	c3000	9	12.3	13	1	ABC76836	Oligonucleotide SE
c2928	9	12.3	13	1	ABH64270	Oligonucleotide SE	3001	9	12.3	13	1	ABC28050	Oligonucleotide SE
c2929	9	12.3	13	1	ABC42604	Oligonucleotide SE	c3002	9	12.3	13	1	ABC04537	Oligonucleotide SE
c2930	9	12.3	13	1	ABC68272	Oligonucleotide SE	c3003	9	12.3	13	1	ABC31014	Oligonucleotide SE
c2931	9	12.3	13	1	ABC68635	Oligonucleotide SE	3004	9	12.3	13	1	ABC06713	Oligonucleotide SE
c2932	9	12.3	13	1	ABC69660	Oligonucleotide SE	c3005	9	12.3	13	1	ABF11490	Oligonucleotide SE
c2933	9	12.3	13	1	ABC26052	Oligonucleotide SE	3006	9	12.3	13	1	ABF12491	Oligonucleotide SE
c2934	9	12.3	13	1	ABC51257	Oligonucleotide SE	c3007	9	12.3	13	1	ABC90353	Oligonucleotide SE
c2935	9	12.3	13	1	ABC52699	Oligonucleotide SE	3008	9	12.3	13	1	ABF18549	Oligonucleotide SE
c2936	9	12.3	13	1	ABC06586	Oligonucleotide SE	3009	9	12.3	13	1	ABF19502	Oligonucleotide SE
c2937	9	12.3	13	1	ABC82246	Oligonucleotide SE	c3010	9	12.3	13	1	ABF67571	Oligonucleotide SE
c2938	9	12.3	13	1	ABC57714	Oligonucleotide SE	c3011	9	12.3	13	1	ABF93597	Oligonucleotide SE
c2939	9	12.3	13	1	ABC58866	Oligonucleotide SE	3012	9	12.3	13	1	ABH19780	Oligonucleotide SE
c2940	9	12.3	13	1	ABC84467	Oligonucleotide SE	3013	9	12.3	13	1	ABF95850	Oligonucleotide SE
c2941	9	12.3	13	1	ABC84874	Oligonucleotide SE	c3014	9	12.3	13	1	ABF97055	Oligonucleotide SE
c2942	9	12.3	13	1	ABC35207	Oligonucleotide SE	3015	9	12.3	13	1	ABH22862	Oligonucleotide SE
c2943	9	12.3	13	1	ABC65874	Oligonucleotide SE	c3016	9	12.3	13	1	ABH22863	Oligonucleotide SE
c2944	9	12.3	13	1	ABF22309	Oligonucleotide SE	3017	9	12.3	13	1	ABF53614	Oligonucleotide SE
c2945	9	12.3	13	1	ABF30885	Oligonucleotide SE	3018	9	12.3	13	1	ABF82802	Oligonucleotide SE
c2946	9	12.3	13	1	ABF35188	Oligonucleotide SE	c3019	9	12.3	13	1	ABH12773	Oligonucleotide SE
c2947	9	12.3	13	1	ABF35189	Oligonucleotide SE	c3020	9	12.3	13	1	ABH41563	Oligonucleotide SE
c2948	9	12.3	13	1	ABF94714	Oligonucleotide SE	3021	9	12.3	13	1	ABH45605	Oligonucleotide SE
c2949	9	12.3	13	1	ABF71892	Oligonucleotide SE	3022	9	12.3	13	1	ABH62478	Oligonucleotide SE
c2950	9	12.3	13	1	ABF71893	Oligonucleotide SE	3023	9	12.3	13	1	ABH62903	Oligonucleotide SE
c2951	9	12.3	13	1	ABF73038	Oligonucleotide SE	c3024	9	12.3	13	1	ABH68273	Oligonucleotide SE
c2952	9	12.3	13	1	ABF75024	Oligonucleotide SE	3025	9	12.3	13	1	ABC69070	Oligonucleotide SE
c2953	9	12.3	13	1	ABF83104	Oligonucleotide SE	c3026	9	12.3	13	1	ABC45131	Oligonucleotide SE

33027	9	12.3	13	1	ABC47612	Oligonucleotide SE	c3100	9	12.3	13	1	ABC56915	Oligonucleotide SE
33028	9	12.3	13	1	ABC72753	Oligonucleotide SE	c3101	9	12.3	13	1	ABC83126	Oligonucleotide SE
33029	9	12.3	13	1	ABF01103	Oligonucleotide SE	3102	9	12.3	13	1	ABC09627	Oligonucleotide SE
33030	9	12.3	13	1	ABC01413	Oligonucleotide SE	3103	9	12.3	13	1	ABC10634	Oligonucleotide SE
33031	9	12.3	13	1	ABF01308	Oligonucleotide SE	c3104	9	12.3	13	1	ABC61055	Oligonucleotide SE
33032	9	12.3	13	1	ABC79139	Oligonucleotide SE	c3105	9	12.3	13	1	ABC87509	Oligonucleotide SE
33033	9	12.3	13	1	ABC04718	Oligonucleotide SE	c3106	9	12.3	13	1	ABC62782	Oligonucleotide SE
33034	9	12.3	13	1	ABC63699	Oligonucleotide SE	c3107	9	12.3	13	1	ABC88438	Oligonucleotide SE
33035	9	12.3	13	1	ABC90351	Oligonucleotide SE	c3108	9	12.3	13	1	ABC64249	Oligonucleotide SE
33036	9	12.3	13	1	ABF19503	Oligonucleotide SE	3109	9	12.3	13	1	ABF15156	Oligonucleotide SE
33037	9	12.3	13	1	ABF33097	Oligonucleotide SE	c3110	9	12.3	13	1	ABF22308	Oligonucleotide SE
33038	9	12.3	13	1	ABF39141	Oligonucleotide SE	c3111	9	12.3	13	1	ABF26005	Oligonucleotide SE
33039	9	12.3	13	1	ABF45493	Oligonucleotide SE	3112	9	12.3	13	1	ABF40353	Oligonucleotide SE
33040	9	12.3	13	1	ABF73039	Oligonucleotide SE	c3113	9	12.3	13	1	ABF40354	Oligonucleotide SE
33041	9	12.3	13	1	ABF99179	Oligonucleotide SE	c3114	9	12.3	13	1	ABF94867	Oligonucleotide SE
33042	9	12.3	13	1	ABF50734	Oligonucleotide SE	c3115	9	12.3	13	1	ABF46239	Oligonucleotide SE
33043	9	12.3	13	1	ABF52509	Oligonucleotide SE	c3116	9	12.3	13	1	ABF46626	Oligonucleotide SE
33044	9	12.3	13	1	ABH32688	Oligonucleotide SE	3117	9	12.3	13	1	ABF97552	Oligonucleotide SE
33045	9	12.3	13	1	ABH08413	Oligonucleotide SE	c3118	9	12.3	13	1	ABF99610	Oligonucleotide SE
33046	9	12.3	13	1	ABH33666	Oligonucleotide SE	3119	9	12.3	13	1	ABF50938	Oligonucleotide SE
33047	9	12.3	13	1	ABF94617	Oligonucleotide SE	c3120	9	12.3	13	1	ABF83105	Oligonucleotide SE
33048	9	12.3	13	1	ABH37378	Oligonucleotide SE	3121	9	12.3	13	1	ABF08412	Oligonucleotide SE
33049	9	12.3	13	1	ABF87724	Oligonucleotide SE	c3122	9	12.3	13	1	ABF83319	Oligonucleotide SE
33050	9	12.3	13	1	ABH14428	Oligonucleotide SE	c3123	9	12.3	13	1	ABF58427	Oligonucleotide SE
33051	9	12.3	13	1	ABH15416	Oligonucleotide SE	3124	9	12.3	13	1	ABH33667	Oligonucleotide SE
33052	9	12.3	13	1	ABH49633	Oligonucleotide SE	3125	9	12.3	13	1	ABH11241	Oligonucleotide SE
33053	9	12.3	13	1	ABC93065	Oligonucleotide SE	3126	9	12.3	13	1	ABH13705	Oligonucleotide SE
33054	9	12.3	13	1	ABC93387	Oligonucleotide SE	3127	9	12.3	13	1	ABF88643	Oligonucleotide SE
33055	9	12.3	13	1	ABC21582	Oligonucleotide SE	3128	9	12.3	13	1	ABF65949	Oligonucleotide SE
33056	9	12.3	13	1	ABC72752	Oligonucleotide SE	3129	9	12.3	13	1	ABF91391	Oligonucleotide SE
33057	9	12.3	13	1	ABC98320	Oligonucleotide SE	c3130	9	12.3	13	1	ABH45604	Oligonucleotide SE
33058	9	12.3	13	1	ABC28792	Oligonucleotide SE	c3131	9	12.3	13	1	ABH48163	Oligonucleotide SE
33059	9	12.3	13	1	ABC30021	Oligonucleotide SE	3132	9	12.3	13	1	ABH62985	Oligonucleotide SE
33060	9	12.3	13	1	ABC05633	Oligonucleotide SE	3133	9	12.3	13	1	ABC95127	Oligonucleotide SE
33061	9	12.3	13	1	ABC07085	Oligonucleotide SE	c3134	9	12.3	13	1	ABC95127	Oligonucleotide SE
33062	9	12.3	13	1	ABC07439	Oligonucleotide SE	3135	9	12.3	13	1	ABC23822	Oligonucleotide SE
33063	9	12.3	13	1	ABC56914	Oligonucleotide SE	c3136	9	12.3	13	1	ABC74242	Oligonucleotide SE
33064	9	12.3	13	1	ABC32665	Oligonucleotide SE	3137	9	12.3	13	1	ABC49174	Oligonucleotide SE
33065	9	12.3	13	1	ABC84466	Oligonucleotide SE	c3138	9	12.3	13	1	ABC74793	Oligonucleotide SE
33066	9	12.3	13	1	ABC10635	Oligonucleotide SE	3139	9	12.3	13	1	ABC01412	Oligonucleotide SE
33067	9	12.3	13	1	ABC35057	Oligonucleotide SE	c3140	9	12.3	13	1	ABC06460	Oligonucleotide SE
33068	9	12.3	13	1	ABF12490	Oligonucleotide SE	c3141	9	12.3	13	1	ABC06712	Oligonucleotide SE
33069	9	12.3	13	1	ABC37555	Oligonucleotide SE	3142	9	12.3	13	1	ABC57715	Oligonucleotide SE
33070	9	12.3	13	1	ABC87508	Oligonucleotide SE	3143	9	12.3	13	1	ABC13537	Oligonucleotide SE
33071	9	12.3	13	1	ABC64902	Oligonucleotide SE	3144	9	12.3	13	1	ABC88439	Oligonucleotide SE
33072	9	12.3	13	1	ABF30884	Oligonucleotide SE	3145	9	12.3	13	1	ABC14399	Oligonucleotide SE
33073	9	12.3	13	1	ABF37417	Oligonucleotide SE	c3146	9	12.3	13	1	ABF15155	Oligonucleotide SE
33074	9	12.3	13	1	ABF67623	Oligonucleotide SE	3147	9	12.3	13	1	ABF26004	Oligonucleotide SE
33075	9	12.3	13	1	ABF69143	Oligonucleotide SE	3148	9	12.3	13	1	ABF27636	Oligonucleotide SE
33076	9	12.3	13	1	ABH19781	Oligonucleotide SE	c3149	9	12.3	13	1	ABF39140	Oligonucleotide SE
33077	9	12.3	13	1	ABF70317	Oligonucleotide SE	3150	9	12.3	13	1	ABF98782	Oligonucleotide SE
33078	9	12.3	13	1	ABF70798	Oligonucleotide SE	c3151	9	12.3	13	1	ABH06169	Oligonucleotide SE
33079	9	12.3	13	1	ABF46238	Oligonucleotide SE	c3152	9	12.3	13	1	ABF56728	Oligonucleotide SE
33080	9	12.3	13	1	ABH22110	Oligonucleotide SE	3153	9	12.3	13	1	ABF56729	Oligonucleotide SE
33081	9	12.3	13	1	ABF74087	Oligonucleotide SE	c3154	9	12.3	13	1	ABH32689	Oligonucleotide SE
33082	9	12.3	13	1	ABF99809	Oligonucleotide SE	3155	9	12.3	13	1	ABH33318	Oligonucleotide SE
33083	9	12.3	13	1	ABH26166	Oligonucleotide SE	c3156	9	12.3	13	1	ABF91580	Oligonucleotide SE
33084	9	12.3	13	1	ABF54253	Oligonucleotide SE	c3157	9	12.3	13	1	ABH61884	Oligonucleotide SE
33085	9	12.3	13	1	ABH31033	Oligonucleotide SE	3158	9	12.3	13	1	ABC43716	Oligonucleotide SE
33086	9	12.3	13	1	ABH06168	Oligonucleotide SE	3159	9	12.3	13	1	ABC69617	Oligonucleotide SE
33087	9	12.3	13	1	ABF57868	Oligonucleotide SE	c3160	9	12.3	13	1	ABC72153	Oligonucleotide SE
33088	9	12.3	13	1	ABH10089	Oligonucleotide SE	c3161	9	12.3	13	1	ABC49175	Oligonucleotide SE
33089	9	12.3	13	1	ABF60290	Oligonucleotide SE	3162	9	12.3	13	1	ABC74792	Oligonucleotide SE
33090	9	12.3	13	1	ABF64673	Oligonucleotide SE	c3163	9	12.3	13	1	ABC00207	Oligonucleotide SE
33091	9	12.3	13	1	ABH55806	Oligonucleotide SE	3164	9	12.3	13	1	ABC51256	Oligonucleotide SE
33092	9	12.3	13	1	ABH57232	Oligonucleotide SE	3165	9	12.3	13	1	ABC51256	Oligonucleotide SE
33093	9	12.3	13	1	ABH57917	Oligonucleotide SE	3166	9	12.3	13	1	ABC28793	Oligonucleotide SE
33094	9	12.3	13	1	ABC94526	Oligonucleotide SE	3167	9	12.3	13	1	ABC30078	Oligonucleotide SE
33095	9	12.3	13	1	ABC21593	Oligonucleotide SE	3168	9	12.3	13	1	ABC31015	Oligonucleotide SE
33096	9	12.3	13	1	ABC98321	Oligonucleotide SE	c3169	9	12.3	13	1	ABC07438	Oligonucleotide SE
33097	9	12.3	13	1	ABC28051	Oligonucleotide SE	c3170	9	12.3	13	1	ABF07564	Oligonucleotide SE
33098	9	12.3	13	1	ABC06461	Oligonucleotide SE	c3171	9	12.3	13	1	ABC09626	Oligonucleotide SE
33099	9	12.3	13	1	ABC07319	Oligonucleotide SE	3172	9	12.3	13	1	ABC35206	Oligonucleotide SE

C3173	9	12.3	13	1	ABC64903	Oligonucleotide SE	
C3174	9	12.3	13	1	ABC90352	Oligonucleotide SE	
C3175	9	12.3	13	1	ABF16825	Oligonucleotide SE	
C3176	9	12.3	13	1	ABF19825	Oligonucleotide SE	
C3177	9	12.3	13	1	ABF20970	Oligonucleotide SE	
C3178	9	12.3	13	1	ABF33099	Oligonucleotide SE	
C3179	9	12.3	13	1	ABF35934	Oligonucleotide SE	
C3180	9	12.3	13	1	ABF67404	Oligonucleotide SE	
C3181	9	12.3	13	1	ABF93596	Oligonucleotide SE	
C3182	9	12.3	13	1	ABF94866	Oligonucleotide SE	
C3183	9	12.3	13	1	ABF45492	Oligonucleotide SE	
C3184	9	12.3	13	1	ABF46627	Oligonucleotide SE	
C3185	9	12.3	13	1	ABF46745	Oligonucleotide SE	
C3186	9	12.3	13	1	ABH22108	Oligonucleotide SE	
C3187	9	12.3	13	1	ABH22109	Oligonucleotide SE	
C3188	9	12.3	13	1	ABF99808	Oligonucleotide SE	
C3189	9	12.3	13	1	ABH00054	Oligonucleotide SE	
C3190	9	12.3	13	1	ABF75025	Oligonucleotide SE	
C3191	9	12.3	13	1	ABF50735	Oligonucleotide SE	
C3192	9	12.3	13	1	ABF55297	Oligonucleotide SE	
C3193	9	12.3	13	1	ABH33438	Oligonucleotide SE	
C3194	9	12.3	13	1	ABH09027	Oligonucleotide SE	
C3195	9	12.3	13	1	ABF84616	Oligonucleotide SE	
C3196	9	12.3	13	1	ABH10088	Oligonucleotide SE	
C3197	9	12.3	13	1	ABF86232	Oligonucleotide SE	
C3198	9	12.3	13	1	ABF63757	Oligonucleotide SE	
C3199	9	12.3	13	1	ABF65844	Oligonucleotide SE	
C3200	9	12.3	13	1	ABF90916	Oligonucleotide SE	
C3201	9	12.3	13	1	ABH41562	Oligonucleotide SE	
C3202	9	12.3	13	1	ABH42699	Oligonucleotide SE	
C3203	9	12.3	13	1	ABH43248	Oligonucleotide SE	
C3204	9	12.3	13	1	ABH44335	Oligonucleotide SE	
C3205	9	12.3	13	1	ABH48113	Oligonucleotide SE	
C3206	9	12.3	13	1	ABH49519	Oligonucleotide SE	
C3207	9	12.3	13	1	ABH49632	Oligonucleotide SE	
C3208	9	12.3	13	1	ABH55807	Oligonucleotide SE	
C3209	9	12.3	13	1	ABH64271	Oligonucleotide SE	
C3210	9	12.3	13	1	ABC45130	Oligonucleotide SE	
C3211	9	12.3	13	1	ABC72993	Oligonucleotide SE	
C3212	9	12.3	13	1	ABC74362	Oligonucleotide SE	
C3213	9	12.3	13	1	ABC24389	Oligonucleotide SE	
C3214	9	12.3	13	1	ABC52698	Oligonucleotide SE	
C3215	9	12.3	13	1	ABC04719	Oligonucleotide SE	
C3216	9	12.3	13	1	ABC30020	Oligonucleotide SE	
C3217	9	12.3	13	1	ABC30079	Oligonucleotide SE	
C3218	9	12.3	13	1	ABF07565	Oligonucleotide SE	
C3219	9	12.3	13	1	ABC10609	Oligonucleotide SE	
C3220	9	12.3	13	1	ABC11795	Oligonucleotide SE	
C3221	9	12.3	13	1	ABF12493	Oligonucleotide SE	
C3222	9	12.3	13	1	ABC15318	Oligonucleotide SE	
C3223	9	12.3	13	1	ABF14654	Oligonucleotide SE	
C3224	9	12.3	13	1	ABF27637	Oligonucleotide SE	
C3225	9	12.3	13	1	ABF37416	Oligonucleotide SE	
C3226	9	12.3	13	1	ABF40355	Oligonucleotide SE	
C3227	9	12.3	13	1	ABF40971	Oligonucleotide SE	
C3228	9	12.3	13	1	ABF69192	Oligonucleotide SE	
C3229	9	12.3	13	1	ABF96353	Oligonucleotide SE	
C3230	9	12.3	13	1	ABH01312	Oligonucleotide SE	
C3231	9	12.3	13	1	ABH29132	Oligonucleotide SE	
C3232	9	12.3	13	1	ABH31032	Oligonucleotide SE	
C3233	9	12.3	13	1	ABH06810	Oligonucleotide SE	
C3234	9	12.3	13	1	ABF82803	Oligonucleotide SE	
C3235	9	12.3	13	1	ABF87317	Oligonucleotide SE	
C3236	9	12.3	13	1	ABH13338	Oligonucleotide SE	
C3237	9	12.3	13	1	ABH13704	Oligonucleotide SE	
C3238	9	12.3	13	1	ABF88642	Oligonucleotide SE	
C3239	9	12.3	13	1	ABH15417	Oligonucleotide SE	
C3240	9	12.3	13	1	ABH40454	Oligonucleotide SE	
C3241	9	12.3	13	1	ABH40455	Oligonucleotide SE	
C3242	9	12.3	13	1	ABF65845	Oligonucleotide SE	
C3243	9	12.3	13	1	ABH61417	Oligonucleotide SE	
C3244	9	12.3	13	1	ABC93064	Oligonucleotide SE	
C3245	9	12.3	13	1	ABF02988	Oligonucleotide SE	
	3246	9	12.3	13	1	ABC54406	Oligonucleotide SE
	C3247	9	12.3	13	1	ABC05359	Oligonucleotide SE
	3248	9	12.3	13	1	ABC05632	Oligonucleotide SE
	C3249	9	12.3	13	1	ABC07084	Oligonucleotide SE
	C3250	9	12.3	13	1	ABC58962	Oligonucleotide SE
	C3251	9	12.3	13	1	ABF09983	Oligonucleotide SE
	C3252	9	12.3	13	1	ABC64898	Oligonucleotide SE
	C3253	9	12.3	13	1	ABC64899	Oligonucleotide SE
	C3254	9	12.3	13	1	ABF15969	Oligonucleotide SE
	C3255	9	12.3	13	1	ABF20971	Oligonucleotide SE
	C3256	9	12.3	13	1	ABF30875	Oligonucleotide SE
	C3257	9	12.3	13	1	ABF35935	Oligonucleotide SE
	C3258	9	12.3	13	1	ABF94715	Oligonucleotide SE
	C3259	9	12.3	13	1	ABF70799	Oligonucleotide SE
	C3260	9	12.3	13	1	ABF50896	Oligonucleotide SE
	C3261	9	12.3	13	1	ABF54384	Oligonucleotide SE
	C3262	9	12.3	13	1	ABF79808	Oligonucleotide SE
	C3263	9	12.3	13	1	ABF55775	Oligonucleotide SE
	C3264	9	12.3	13	1	ABH33663	Oligonucleotide SE
	C3265	9	12.3	13	1	ABH09026	Oligonucleotide SE
	C3266	9	12.3	13	1	ABF85210	Oligonucleotide SE
	C3267	9	12.3	13	1	ABF87725	Oligonucleotide SE
	C3268	9	12.3	13	1	ABH44334	Oligonucleotide SE
	C3269	9	12.3	13	1	ABH53731	Oligonucleotide SE
	C3270	9	12.3	13	1	ABH61885	Oligonucleotide SE
	C3271	9	12.3	13	1	ABH62902	Oligonucleotide SE
	C3272	9	12.3	13	1	ABC42333	Oligonucleotide SE
	C3273	9	12.3	13	1	ABC42605	Oligonucleotide SE
	C3274	9	12.3	13	1	ABC67775	Oligonucleotide SE
	C3275	9	12.3	13	1	ABC68721	Oligonucleotide SE
	C3276	9	12.3	13	1	ABC00206	Oligonucleotide SE
	C3277	9	12.3	13	1	ABC82247	Oligonucleotide SE
	C3278	9	12.3	13	1	ABC58867	Oligonucleotide SE
	C3279	9	12.3	13	1	ABC35056	Oligonucleotide SE
	C3280	9	12.3	13	1	ABC63698	Oligonucleotide SE
	C3281	9	12.3	13	1	ABC15319	Oligonucleotide SE
	C3282	9	12.3	13	1	ABF15157	Oligonucleotide SE
	C3283	9	12.3	13	1	ABF42528	Oligonucleotide SE
	C3284	9	12.3	13	1	ABF67570	Oligonucleotide SE
	C3285	9	12.3	13	1	ABF67622	Oligonucleotide SE
	C3286	9	12.3	13	1	ABF70316	Oligonucleotide SE
	C3287	9	12.3	13	1	ABF50636	Oligonucleotide SE
	C3288	9	12.3	13	1	ABH01313	Oligonucleotide SE
	C3289	9	12.3	13	1	ABF55719	Oligonucleotide SE
	C3290	9	12.3	13	1	ABH33662	Oligonucleotide SE
	C3291	9	12.3	13	1	ABF60291	Oligonucleotide SE
	C3292	9	12.3	13	1	ABF85998	Oligonucleotide SE
	C3293	9	12.3	13	1	ABH11240	Oligonucleotide SE
	C3294	9	12.3	13	1	ABF87391	Oligonucleotide SE
	C3295	9	12.3	13	1	ABF87394	Oligonucleotide SE
	C3296	9	12.3	13	1	ABF90917	Oligonucleotide SE
	C3297	9	12.3	13	1	ABH43249	Oligonucleotide SE
	C3298	9	12.3	13	1	ACC78734	Oligonucleotide SE
	C3299	9	12.3	13	1	ACC78848	Oligonucleotide SE
	3300	9	12.3	13	1	ADC64963	Oligonucleotide SE
						Camellia sinensis	
RESULT 1							
AAZ48533/c							
ID	AAZ48533	standard; DNA; 18 BP.					
XX							
AC	AAZ48533;						
XX							
DT	31-MAR-2000	(first entry)					
XX							
DE	Human TNFR1 mRNA	inhibiting antisense oligo ISIS# 18926.					
XX							
KW	Tumour necrosis factor receptor type 1; TNFR1;	antisense; infection;					
KW	inflammation; tumour formation; TNFR1;	anticancer; ss.					
XX							

```

3 Synthetic.
4 Homo sapiens.
5 US6007995-A.
6 X
7 D 28-DEC-1999.
8 X
9 E 26-JUN-1998; 98US-00106038.
10 X
11 R 26-JUN-1998; 98US-00106038.
12 X
13 A (ISIS-) ISIS PHARM INC.
14 X
15 I Baker BF, Cowsett LM;
16 X WPI; 2000-105333/09.
17 X
18 F Antisense inhibition of tumor necrosis factor type 1 expression for
19 diagnosis, treatment and prevention of disease, particularly tumors.
20 X
21 Claim 1; Col 25; 34pp; English.
22 X
23 The invention provides antisense compounds targeted to human tumour
24 necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
25 can be used in a method of inhibiting the expression of TNFR1 human cells
26 or tissues. The antisense compounds specifically hybridize with one or
27 more nucleic acids encoding TNFR1 modulating the function of nucleic acid
28 molecules encoding TNFR1, ultimately modulating the amount of TNFR1
29 produced. The antisense compounds and method are useful as research
30 reagents and diagnostics, and in the treatment and prophylaxis of
31 infection, inflammation or tumour formation. Sequences AAZ48482-565
32 represent antisense oligos used for inhibition of the human TNFR1 mRNA
33
34 Sequence 18 BP; 4 A; 4 C; 5 G; 5 T; 0 U; 0 Other;
35
36 Query Match 24.7%; Score 18; DB 1; Length 18;
37 Best Local Similarity 100.0%; Pred. No. 58;
38 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
39
40 952 ATGTATCGTACCAACGG 969
41 |||||
42 18 ATGTATCGTACCAACGG 1
43
44 RESULT 2
45 AAZ48528/c
46 AAZ48528 standard; DNA; 18 BP.
47 X
48 AAZ48528;
49 X
50 31-MAR-2000 (first entry)
51
52 Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18921.
53
54 Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;
55 inflammation; tumour formation; TNFR1; anticancer; ss.
56
57 Synthetic.
58 Homo sapiens.
59 US6007995-A.
60 X
61 28-DEC-1999.
62 X
63 26-JUN-1998; 98US-00106038.
64 X
65 26-JUN-1998; 98US-00106038.
66 X
67 (ISIS-) ISIS PHARM INC.
68 X
69 Baker BF, Cowsett LM;
70 X WPI; 2000-105333/09.
71 X

```

```

xx Antisense inhibition of tumor necrosis factor type 1 expression for
pt diagnosis, treatment and prevention of disease, particularly tumors.
xx
xx Example 10; Col 25; 34pp; English.
xx
xx The invention provides antisense compounds targeted to human tumour
cc necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
cc can be used in a method of inhibiting the expression of TNFR1 human cells
cc or tissues. The antisense compounds specifically hybridize with one or
cc more nucleic acids encoding TNFR1 modulating the function of nucleic acid
cc molecules encoding TNFR1, ultimately modulating the amount of TNFR1
cc produced. The antisense compounds and method are useful as research
cc reagents and diagnostics, and in the treatment and prophylaxis of
cc infection, inflammation or tumour formation. Sequences AAZ48482-565
cc represent antisense oligos used for inhibition of the human TNFR1 mRNA
xx
xx Sequence 18 BP; 11 A; 3 C; 3 G; 1 T; 0 U; 0 Other;
sq
xx
xx Query Match 24.7%; Score 18; DB 1; Length 18;
xx Best Local Similarity 100.0%; Pred. No. 58;
xx Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
xx
xx 906 CATTTCCTTTGGTCTTTG 923
xx |||||
xx 18 CATTTCCTTTGGTCTTTG 1
xx
xx RESULT 3
xx AAZ48532/c
xx ID AAZ48532 standard; DNA; 18 BP.
xx X
xx AAZ48532;
xx X
xx 31-MAR-2000 (first entry)
xx
xx Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18925.
xx
xx Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;
xx inflammation; tumour formation; TNFR1; anticancer; ss.
xx
xx Synthetic.
xx Homo sapiens.
xx US6007995-A.
xx X
xx 28-DEC-1999.
xx
xx 26-JUN-1998; 98US-00106038.
xx
xx 26-JUN-1998; 98US-00106038.
xx
xx (ISIS-) ISIS PHARM INC.
xx
xx Baker BF, Cowsett LM;
xx X WPI; 2000-105333/09.
xx
xx Antisense inhibition of tumor necrosis factor type 1 expression for
pt diagnosis, treatment and prevention of disease, particularly tumors.
xx
xx Example 10; Col 25; 34pp; English.
xx
xx The invention provides antisense compounds targeted to human tumour
cc necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
cc can be used in a method of inhibiting the expression of TNFR1 human cells
cc or tissues. The antisense compounds specifically hybridize with one or
cc more nucleic acids encoding TNFR1 modulating the function of nucleic acid
cc molecules encoding TNFR1, ultimately modulating the amount of TNFR1
cc produced. The antisense compounds and method are useful as research
cc reagents and diagnostics, and in the treatment and prophylaxis of
cc infection, inflammation or tumour formation. Sequences AAZ48482-565
cc represent antisense oligos used for inhibition of the human TNFR1 mRNA
cc

```

```
XX SQ Sequence 18 BP; 9 A; 2 C; 4 G; 3 T; 0 U; 0 Other;
Query Match 24.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 58;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 935 TCCTCTTCATTGGTTTAA 952
DB 18 TCCTCTTCATTGGTTTAA 1
RESULT 4
AAZ48529/c
ID AAZ48529 standard; DNA; 18 BP.
XX AC AAZ48529;
XX DT 31-MAR-2000 (first entry)
XX DE Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18922.
XX KW Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;
XX KW inflammation; tumour formation; TNFR1; anticancer; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX PN US6007995-A.
XX PD 28-DEC-1999.
XX PF 26-JUN-1998; 98US-00106038.
XX PR 26-JUN-1998; 98US-00106038.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Baker BF, Cowser LM;
XX PS WPI; 2000-105333/09.
XX PT Antisense inhibition of tumor necrosis factor type 1 expression for
XX PT diagnosis, treatment and prevention of disease, particularly tumors.
XX PS Example 10; Col 25; 34pp; English.
XX CC The invention provides antisense compounds targeted to human tumour
XX CC necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
XX CC can be used in a method of inhibiting the expression of TNFR1 human cells
XX CC or tissues. The antisense compounds specifically hybridize with one or
XX CC more nucleic acids encoding TNFR1 modulating the function of nucleic acid
XX CC molecules encoding TNFR1, ultimately modulating the amount of TNFR1
XX CC produced. The antisense compounds and method are useful as research
XX CC reagents and diagnostics, and in the treatment and prophylaxis of
XX CC infection, inflammation or tumour formation. Sequences AAZ48482-565
XX CC represent antisense oligos used for inhibition of the human TNFR1 mRNA
XX SQ Sequence 18 BP; 8 A; 1 C; 7 G; 2 T; 0 U; 0 Other;
Query Match 24.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 58;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 929 TATCCCTCCTCTTCATTG 946
DB 18 TATCCCTCCTCTTCATTG 1
RESULT 6
AAZ48530/c
ID AAZ48530 standard; DNA; 18 BP.
XX AC AAZ48530;
XX DT 31-MAR-2000 (first entry)
XX DE Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18923.
XX KW Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;
XX KW inflammation; tumour formation; TNFR1; anticancer; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX PN US6007995-A.
XX PD 28-DEC-1999.
XX PT Antisense inhibition of tumor necrosis factor type 1 expression for
XX PT diagnosis, treatment and prevention of disease, particularly tumors.
XX PS Example 10; Col 25; 34pp; English.
XX CC The invention provides antisense compounds targeted to human tumour
XX CC necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
XX CC can be used in a method of inhibiting the expression of TNFR1 human cells
XX CC or tissues. The antisense compounds specifically hybridize with one or
XX CC more nucleic acids encoding TNFR1 modulating the function of nucleic acid
XX CC molecules encoding TNFR1, ultimately modulating the amount of TNFR1
XX CC produced. The antisense compounds and method are useful as research
XX CC reagents and diagnostics, and in the treatment and prophylaxis of
XX CC infection, inflammation or tumour formation. Sequences AAZ48482-565
XX CC represent antisense oligos used for inhibition of the human TNFR1 mRNA
XX SQ Sequence 18 BP; 11 A; 3 C; 4 G; 0 T; 0 U; 0 Other;
Query Match 24.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 58;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 911 TCTTTGGTCTTTGCCTTT 928
DB 18 TCTTTGGTCTTTGCCTTT 1
RESULT 5
AAZ48531/c
ID AAZ48531 standard; DNA; 18 BP.
XX
```

26-JUN-1998; 98US-00106038.
 26-JUN-1998; 98US-00106038.
 (ISIS-) ISIS PHARM INC.
 Baker BF, Cowsett LM;
 WPI; 2000-105333/09.
 Antisense inhibition of tumor necrosis factor type 1 expression for diagnosis, treatment and prevention of disease, particularly tumors.
 Example 10; Col 25; 34pp; English.
 The invention provides antisense compounds targeted to human tumor necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds can be used in a method of inhibiting the expression of TNFR1 human cells or tissues. The antisense compounds specifically hybridize with one or more nucleic acids encoding TNFR1 modulating the function of nucleic acid molecules encoding TNFR1, ultimately modulating the amount of TNFR1 produced. The antisense compounds and method are useful as research reagents and diagnostics, and in the treatment and prophylaxis of infection, inflammation or tumour formation. Sequences AA248482-565 represent antisense oligos used for inhibition of the human TNFR1 mRNA

Sequence 18 BP; 9 A; 1 C; 7 G; 1 T; 0 U; 0 Other;
 Query Match 24.7%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 58;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

921 TTGCCTTTTATCCCTCCT 938
 18 TTGCCTTTTATCCCTCCT 1

RESULT 7
 T05026/c
 ABT05026 standard; DNA; 18 BP.
 ABT05026;
 11-OCT-2002 (first entry)
 TNFR1 expression modulation related antisense oligo SEQ ID No 56.
 Antisense compound; tumour necrosis factor receptor 1; liver disease; TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer; human; ds.
 Homo sapiens.
 WO200248168-A1.
 20-JUN-2002.
 22-OCT-2001; 2001WO-US051224.
 24-OCT-2000; 2000US-00695451.
 (ISIS-) ISIS PHARM INC.
 Baker BF, Cowsett LM, Zhang H, Dean NM;
 WPI; 2002-583481/62.
 Novel antisense compound targeted to nucleic acid molecule encoding tumor necrosis factor receptor 1 (TNFR1), useful for treating humans having disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
 Example 10; Page 45; 121pp; English.

CC The invention relates to an antisense compound 8 to 30 nucleotides in
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
 CC TNFR1. The antisense compound is useful for inhibiting the expression of
 CC TNFR1 in cells or tissues. The antisense compound is also useful for
 CC treating an animal (preferably human) having a disease or condition
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
 CC the expression of TNFR1. The antisense compound is useful for
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
 CC This polynucleotide sequence represents a human oligonucleotide relating
 CC to the TNFR1 of the invention
 CC
 CC Sequence 18 BP; 9 A; 1 C; 7 G; 1 T; 0 U; 0 Other;
 CC
 CC Query Match 24.7%; Score 18; DB 1; Length 18;
 CC Best Local Similarity 100.0%; Pred. No. 58;
 CC Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 CC
 CC QY 921 TTGCCTTTTATCCCTCCT 938
 CC Db 18 TTGCCTTTTATCCCTCCT 1
 CC
 CC RESULT 8
 CC ABT05029/c
 CC ID ABT05029 standard; DNA; 18 BP.
 CC XX
 CC AC ABT05029;
 CC XX
 CC DT 11-OCT-2002 (first entry)
 CC XX
 CC TNFR1 expression modulation related antisense oligo SEQ ID No 59.
 CC DE
 CC XX Antisense compound; tumour necrosis factor receptor 1; liver disease;
 CC KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
 CC KW human; ds.
 CC XX
 CC OS Homo sapiens.
 CC XX
 CC PN WO200248168-A1.
 CC XX
 CC PD 20-JUN-2002.
 CC XX
 CC PF 22-OCT-2001; 2001WO-US051224.
 CC XX
 CC PR 24-OCT-2000; 2000US-00695451.
 CC XX
 CC PA (ISIS-) ISIS PHARM INC.
 CC XX
 CC PI Baker BF, Cowsett LM, Zhang H, Dean NM;
 CC XX
 CC DR WPI; 2002-583481/62.
 CC XX
 CC PT Novel antisense compound targeted to nucleic acid molecule encoding tumor
 CC necrosis factor receptor 1 (TNFR1), useful for treating humans having
 CC disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
 CC XX
 CC PS Example 10; Page 45; 121pp; English.
 CC XX
 CC The invention relates to an antisense compound 8 to 30 nucleotides in
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
 CC TNFR1. The antisense compound is useful for inhibiting the expression of
 CC TNFR1 in cells or tissues. The antisense compound is also useful for
 CC treating an animal (preferably human) having a disease or condition
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
 CC the expression of TNFR1. The antisense compound is useful for
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
 CC This polynucleotide sequence represents a human oligonucleotide relating
 CC to the TNFR1 of the invention
 CC
 CC XX

WO200248168-A1.
20-JUN-2002.
22-OCT-2001; 2001WO-US051224.
24-OCT-2000; 2000US-00695451.
(ISIS-) ISIS PHARM INC.
Baker BF, Cowser LM, Zhang H, Dean NM;
WPI; 2002-583481/62.
Novel antisense compound targeted to nucleic acid molecule encoding tumor necrosis factor receptor 1 (TNFR1), useful for treating humans having disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
Example 18; Page 56; 121pp; English.
The invention relates to an antisense compound 8 to 30 nucleotides in length targeted to nucleic acid molecule encoding tumour necrosis factor receptor 1 (TNFR1), where the antisense compound inhibits expression of TNFR1. The antisense compound is useful for inhibiting the expression of TNFR1 in cells or tissues. The antisense compound is also useful for treating an animal (preferably human) having a disease or condition associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver injury) or a hyperproliferative disorder such as cancer, by inhibiting the expression of TNFR1. The antisense compound is useful for diagnostics, therapeutics, prophylaxis and as research reagents and kits. This polynucleotide sequence represents a human oligonucleotide relating to the TNFR1 of the invention
Sequence 18 BP; 9 A; 0 C; 8 G; 1 T; 0 U; 0 Other;
Query Match 24.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 58;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
925 CTTTATCCCTCCTTC 942
18 CTTTATCCCTCCTTC 1
RESULT 12
ABT05093/c
ABT05093 standard; DNA; 18 BP.
ABT05093;
11-OCT-2002 (first entry)
TNFR1 expression modulation related antisense oligo SEQ ID No 123.
Antisense compound; tumour necrosis factor receptor 1; liver disease; TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer; human; ds.
Homo sapiens.
WO200248168-A1.
20-JUN-2002.
22-OCT-2001; 2001WO-US051224.
24-OCT-2000; 2000US-00695451.
(ISIS-) ISIS PHARM INC.
Baker BF, Cowser LM, Zhang H, Dean NM;

DR WPI; 2002-583481/62.
XX Novel antisense compound targeted to nucleic acid molecule encoding tumor necrosis factor receptor 1 (TNFR1), useful for treating humans having disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX Example 18; Page 56; 121pp; English.
XX The invention relates to an antisense compound 8 to 30 nucleotides in length targeted to nucleic acid molecule encoding tumour necrosis factor receptor 1 (TNFR1), where the antisense compound inhibits expression of TNFR1. The antisense compound is useful for inhibiting the expression of TNFR1 in cells or tissues. The antisense compound is also useful for treating an animal (preferably human) having a disease or condition associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver injury) or a hyperproliferative disorder such as cancer, by inhibiting the expression of TNFR1. The antisense compound is useful for diagnostics, therapeutics, prophylaxis and as research reagents and kits. This polynucleotide sequence represents a human oligonucleotide relating to the TNFR1 of the invention
XX Sequence 18 BP; 11 A; 3 C; 4 G; 0 T; 0 U; 0 Other;
SQ Query Match 24.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 58;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
909 TTTCTTGGTCTTGGCT 926
18 TTTCTTGGTCTTGGCT 1
Db
RESULT 13
ABT05100/c
ID ABT05100 standard; DNA; 18 BP.
XX AC ABT05100;
XX DT 11-OCT-2002 (first entry)
XX DE TNFR1 expression modulation related antisense oligo SEQ ID No 130.
XX Antisense compound; tumour necrosis factor receptor 1; liver disease; TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer; human; ds.
XX OS Homo sapiens.
XX PN WO200248168-A1.
XX PD 20-JUN-2002.
XX PF 22-OCT-2001; 2001WO-US051224.
XX PR 24-OCT-2000; 2000US-00695451.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Baker BF, Cowser LM, Zhang H, Dean NM;
XX DR WPI; 2002-583481/62.
XX Novel antisense compound targeted to nucleic acid molecule encoding tumor necrosis factor receptor 1 (TNFR1), useful for treating humans having disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX Example 18; Page 56; 121pp; English.
XX The invention relates to an antisense compound 8 to 30 nucleotides in length targeted to nucleic acid molecule encoding tumour necrosis factor receptor 1 (TNFR1), where the antisense compound inhibits expression of TNFR1. The antisense compound is useful for inhibiting the expression of TNFR1 in cells or tissues. The antisense compound is also useful for treating an animal (preferably human) having a disease or condition associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver injury) or a hyperproliferative disorder such as cancer, by inhibiting the expression of TNFR1. The antisense compound is useful for diagnostics, therapeutics, prophylaxis and as research reagents and kits. This polynucleotide sequence represents a human oligonucleotide relating to the TNFR1 of the invention
CC

CC treating an animal (preferably human) having a disease or condition
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
 CC the expression of TNFR1. The antisense compound is useful for
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
 CC This polynucleotide sequence represents a human oligonucleotide relating
 CC to the TNFR1 of the invention
 CC
 XX
 SQ Sequence 18 BP; 8 A; 2 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 24.7%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 58;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 931 TCCTCTCTTCATTGGT 948
 |||||
 Db 18 TCCTCTCTTCATTGGT 1

RESULT 14
 ABT05096/c
 ID ABT05096 standard; DNA; 18 BP.

XX
 AC ABT05096;

XX
 DT 11-OCT-2002 (first entry)

XX TNFR1 expression modulation related antisense oligo SEQ ID No 126.

XX Antisense compound; tumour necrosis factor receptor 1; liver disease;
 KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
 KW human; ds.

XX Homo sapiens.

XX WO200248168-A1.

XX 20-JUN-2002.

XX 22-OCT-2001; 2001WO-US051224.

XX 24-OCT-2000; 2000US-00695451.

XX (ISIS-) ISIS PHARM INC.

XX Baker BF, Cowser LM, Zhang H, Dean NM;

XX WPI; 2002-583481/62.

XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
 FT necrosis factor receptor 1 (TNFR1), useful for treating humans having
 FT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.

XX Example 18; Page 56; 121pp; English.

XX The invention relates to an antisense compound 8 to 30 nucleotides in
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
 CC TNFR1. The antisense compound is useful for inhibiting the expression of
 CC TNFR1 in cells or tissues. The antisense compound is also useful for
 CC treating an animal (preferably human) having a disease or condition
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
 CC the expression of TNFR1. The antisense compound is useful for
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
 CC This polynucleotide sequence represents a human oligonucleotide relating
 CC to the TNFR1 of the invention
 CC
 XX

SQ Sequence 18 BP; 9 A; 1 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 24.7%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 58;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 919 CTTTGCTTTTATCCCTC 936
 |||||
 Db 18 CTTTGCTTTTATCCCTC 1

RESULT 15

ABT05028/c

ID ABT05028 standard; DNA; 18 BP.

XX
 AC ABT05028;

XX 11-OCT-2002 (first entry)

XX TNFR1 expression modulation related antisense oligo SEQ ID No 58.

XX Antisense compound; tumour necrosis factor receptor 1; liver disease;
 KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
 KW human; ds.

XX Homo sapiens.

XX WO200248168-A1.

XX 20-JUN-2002.

XX 22-OCT-2001; 2001WO-US051224.

XX 24-OCT-2000; 2000US-00695451.

XX (ISIS-) ISIS PHARM INC.

XX Baker BF, Cowser LM, Zhang H, Dean NM;

XX WPI; 2002-583481/62.

XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
 FT necrosis factor receptor 1 (TNFR1), useful for treating humans having
 FT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.

XX Example 10; Page 45; 121pp; English.

XX The invention relates to an antisense compound 8 to 30 nucleotides in
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
 CC TNFR1. The antisense compound is useful for inhibiting the expression of
 CC TNFR1 in cells or tissues. The antisense compound is also useful for
 CC treating an animal (preferably human) having a disease or condition
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
 CC the expression of TNFR1. The antisense compound is useful for
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
 CC This polynucleotide sequence represents a human oligonucleotide relating
 CC to the TNFR1 of the invention
 CC
 XX

SQ Sequence 18 BP; 9 A; 2 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 24.7%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 58;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 935 TCCTCTTCATTGGTTAA 952
 |||||
 Db 18 TCCTCTTCATTGGTTAA 1

RESULT 16

ABT05094/c

ID ABT05094 standard; DNA; 18 BP.

XX
 AC ABT05094;

XX 11-OCT-2002 (first entry)

```
X TNFR1 expression modulation related antisense oligo SEQ ID No 124.
E Antisense compound; tumour necrosis factor receptor 1; liver disease;
W TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
W human; ds.
W
S Homo sapiens.
X
X WO200248168-A1.
X
X 20-JUN-2002.
D
X 22-OCT-2001; 2001WO-US051224.
F
X 24-OCT-2000; 2000US-00695451.
R
X (ISIS-) ISIS PHARM INC.
A
X Baker BF, Cowser LM, Zhang H, Dean NM;
X WPI; 2002-583481/62.
X
X Novel antisense compound targeted to nucleic acid molecule encoding tumor
I necrosis factor receptor 1 (TNFR1), useful for treating humans having
I disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
I
X Example 18; Page 56; 121pp; English.
X
X The invention relates to an antisense compound 8 to 30 nucleotides in
X length targeted to nucleic acid molecule encoding tumour necrosis factor
X receptor 1 (TNFR1), where the antisense compound inhibits expression of
X TNFR1. The antisense compound is useful for inhibiting the expression of
X TNFR1 in cells or tissues. The antisense compound is also useful for
X treating an animal (preferably human) having a disease or condition
X associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
X injury) or a hyperproliferative disorder such as cancer, by inhibiting
X the expression of TNFR1. The antisense compound is useful for
X diagnostics, therapeutics, prophylaxis and as research reagents and kits.
X This polynucleotide sequence represents a human oligonucleotide relating
X to the TNFR1 of the invention
X
X Sequence 18 BP; 10 A; 3 C; 4 G; 1 T; 0 U; 0 Other;
X
X Query Match 24.7%; Score 18; DB 1; Length 18;
X Best Local Similarity 100.0%; Pred. No. 58;
X Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
X
X 915 TGGTCTTTGCCCTTTATC 932
X |||||
X 18 TGGTCTTTGCCCTTTATC 1
X
X RESULT 17
X T05097/c
X ABT05097 standard; DNA; 18 BP.
X
X ABT05097;
X
X 11-OCT-2002 (first entry)
X
X TNFR1 expression modulation related antisense oligo SEQ ID No 127.
X
X Antisense compound; tumour necrosis factor receptor 1; liver disease;
X TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
X human; ds.
X
X Homo sapiens.
X
X WO200248168-A1.
X
X 20-JUN-2002.
X
```

```
PF 22-OCT-2001; 2001WO-US051224.
XX
XX 24-OCT-2000; 2000US-00695451.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Baker BF, Cowser LM, Zhang H, Dean NM;
XX WPI; 2002-583481/62.
XX
XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
XX
XX Example 18; Page 56; 121pp; English.
XX
XX The invention relates to an antisense compound 8 to 30 nucleotides in
XX length targeted to nucleic acid molecule encoding tumour necrosis factor
XX receptor 1 (TNFR1), where the antisense compound inhibits expression of
XX TNFR1. The antisense compound is useful for inhibiting the expression of
XX TNFR1 in cells or tissues. The antisense compound is also useful for
XX treating an animal (preferably human) having a disease or condition
XX associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
XX injury) or a hyperproliferative disorder such as cancer, by inhibiting
XX the expression of TNFR1. The antisense compound is useful for
XX diagnostics, therapeutics, prophylaxis and as research reagents and kits.
XX This polynucleotide sequence represents a human oligonucleotide relating
XX to the TNFR1 of the invention
XX
XX Sequence 18 BP; 8 A; 1 C; 8 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 24.7%; Score 18; DB 1; Length 18;
XX Best Local Similarity 100.0%; Pred. No. 58;
XX Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 923 GCCTTTATCCCTCTCT 940
XX |||||
XX Db 18 GCCTTTATCCCTCTCT 1
XX
XX RESULT 18
XX ABT05024/c
XX ID ABT05024 standard; DNA; 18 BP.
XX
XX AC ABT05024;
XX
XX DT 11-OCT-2002 (first entry)
XX
XX DE TNFR1 expression modulation related antisense oligo SEQ ID No 54.
XX
XX KW Antisense compound; tumour necrosis factor receptor 1; liver disease;
XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
XX human; ds.
XX
XX OS Homo sapiens.
XX
XX PN WO200248168-A1.
XX
XX PD 20-JUN-2002.
XX
XX PF 22-OCT-2001; 2001WO-US051224.
XX
XX PR 24-OCT-2000; 2000US-00695451.
XX
XX PA (ISIS-) ISIS PHARM INC.
XX
XX PI Baker BF, Cowser LM, Zhang H, Dean NM;
XX WPI; 2002-583481/62.
XX
XX Novel antisense compound targeted to nucleic acid molecule encoding tumor
PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
PT
```

XX Example 10; Page 45; 121pp; English.

XX The invention relates to an antisense compound 8 to 30 nucleotides in length targeted to nucleic acid molecule encoding tumour necrosis factor receptor 1 (TNFR1), where the antisense compound inhibits expression of TNFR1. The antisense compound is useful for inhibiting the expression of TNFR1 in cells or tissues. The antisense compound is also useful for treating an animal (preferably human) having a disease or condition associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver injury) or a hyperproliferative disorder such as cancer, by inhibiting the expression of TNFR1. The antisense compound is useful for diagnostics, therapeutics, prophylaxis and as research reagents and kits. This polynucleotide sequence represents a human oligonucleotide relating to the TNFR1 of the invention

XX Sequence 18 BP; 11 A; 3 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 24.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 58;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 906 CATTTCTTGGTCTTGG 923
|||||
Db 18 CATTTCTTGGTCTTGG 1

RESULT 19
ABT05027/c
ID ABT05027 standard; DNA; 18 BP.

XX AC ABT05027;

XX 11-OCT-2002 (first entry)

TNFR1 expression modulation related antisense oligo SEQ ID No 57.

Antisense compound; tumour necrosis factor receptor 1; liver disease; TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer; human; ds.

Homo sapiens.

WO200248168-A1.

20-JUN-2002.

22-OCT-2001; 2001WO-US051224.

24-OCT-2000; 2000US-00695451.

(ISIS-) ISIS PHARM INC.

Baker BF, Cowser LM, Zhang H, Dean NM;
WPI; 2002-583481/62.

Novel antisense compound targeted to nucleic acid molecule encoding tumor necrosis factor receptor 1 (TNFR1), useful for treating humans having disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.

Example 10; Page 45; 121pp; English.

The invention relates to an antisense compound 8 to 30 nucleotides in length targeted to nucleic acid molecule encoding tumour necrosis factor receptor 1 (TNFR1), where the antisense compound inhibits expression of TNFR1. The antisense compound is useful for inhibiting the expression of TNFR1 in cells or tissues. The antisense compound is also useful for treating an animal (preferably human) having a disease or condition associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver injury) or a hyperproliferative disorder such as cancer, by inhibiting the expression of TNFR1. The antisense compound is useful for diagnostics, therapeutics, prophylaxis and as research reagents and kits. This polynucleotide sequence represents a human oligonucleotide relating to the TNFR1 of the invention

XX Sequence 18 BP; 11 A; 3 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 24.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 58;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 906 CATTTCTTGGTCTTGG 923
|||||
Db 18 CATTTCTTGGTCTTGG 1

CC This polynucleotide sequence represents a human oligonucleotide relating to the TNFR1 of the invention

XX Sequence 18 BP; 8 A; 1 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 24.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 58;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 929 TATCCCTCCTCTTCATTG 946
|||||
Db 18 TATCCCTCCTCTTCATTG 1

RESULT 20
ABT05101/c
ID ABT05101 standard; DNA; 18 BP.

XX AC ABT05101;

XX 11-OCT-2002 (first entry)

TNFR1 expression modulation related antisense oligo SEQ ID No 131.

Antisense compound; tumour necrosis factor receptor 1; liver disease; TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer; human; ds.

Homo sapiens.

WO200248168-A1.

20-JUN-2002.

22-OCT-2001; 2001WO-US051224.

24-OCT-2000; 2000US-00695451.

(ISIS-) ISIS PHARM INC.

Baker BF, Cowser LM, Zhang H, Dean NM;
WPI; 2002-583481/62.

Novel antisense compound targeted to nucleic acid molecule encoding tumor necrosis factor receptor 1 (TNFR1), useful for treating humans having disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.

Example 18; Page 56; 121pp; English.

The invention relates to an antisense compound 8 to 30 nucleotides in length targeted to nucleic acid molecule encoding tumour necrosis factor receptor 1 (TNFR1), where the antisense compound inhibits expression of TNFR1. The antisense compound is useful for inhibiting the expression of TNFR1 in cells or tissues. The antisense compound is also useful for treating an animal (preferably human) having a disease or condition associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver injury) or a hyperproliferative disorder such as cancer, by inhibiting the expression of TNFR1. The antisense compound is useful for diagnostics, therapeutics, prophylaxis and as research reagents and kits. This polynucleotide sequence represents a human oligonucleotide relating to the TNFR1 of the invention

XX Sequence 18 BP; 9 A; 2 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 24.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 58;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 933 CCTCCTCTTCATTGGTTT 950
|||||
Db 18 CCTCCTCTTCATTGGTTT 1

XX PI Baker BF, Cowsert LM, Zhang H, Dean NM;
 XX LR WPI; 2002-583481/62.
 XX PT Novel antisense compound targeted to nucleic acid molecule encoding tumor
 PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
 PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
 XX FS Example 18; Page 56; 121pp; English.
 XX CC The invention relates to an antisense compound 8 to 30 nucleotides in
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
 CC TNFR1 in cells or tissues. The antisense compound is also useful for
 CC treating an animal (preferably human) having a disease or condition
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
 CC the expression of TNFR1. The antisense compound is useful for
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
 CC This polynucleotide sequence represents a human oligonucleotide relating
 CC to the TNFR1 of the invention
 XX SQ Sequence 18 BP; 9 A; 3 C; 5 G; 1 T; 0 U; 0 Other;
 Query Match 24.7%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 58;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 899 CCCTGGTCATTTCTTTG 916
 DB 18 CCCTGGTCATTTCTTTG 1
 RESULT 24
 ABT05099/c
 ID ABT05099 standard; DNA; 18 BP.
 XX AC ABT05099;
 XX DT 11-OCT-2002 (first entry)
 XX DE TNFR1 expression modulation related antisense oligo SEQ ID No 129.
 XX KW Antisense compound; tumour necrosis factor receptor 1; liver disease;
 KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
 KW human; ds.
 XX OS Homo sapiens.
 XX FN WO200248168-A1.
 XX PD 20-JUN-2002.
 XX PF 22-OCT-2001; 2001WO-US051224.
 XX PR 24-OCT-2000; 2000US-00695451.
 XX PA (ISIS-) ISIS PHARM INC.
 XX PI Baker BF, Cowsert LM, Zhang H, Dean NM;
 XX DR WPI; 2002-583481/62.
 XX CC The invention relates to an antisense compound 8 to 30 nucleotides in
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
 CC TNFR1 in cells or tissues. The antisense compound is also useful for
 CC treating an animal (preferably human) having a disease or condition
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
 CC the expression of TNFR1. The antisense compound is useful for
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
 CC This polynucleotide sequence represents a human oligonucleotide relating
 CC to the TNFR1 of the invention
 XX SQ Sequence 18 BP; 9 A; 3 C; 5 G; 1 T; 0 U; 0 Other;
 Query Match 24.7%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 58;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 899 CCCTGGTCATTTCTTTG 916
 DB 18 CCCTGGTCATTTCTTTG 1
 RESULT 24
 ABT05099/c
 ID ABT05099 standard; DNA; 18 BP.
 XX AC ABT05099;
 XX DT 11-OCT-2002 (first entry)
 XX DE TNFR1 expression modulation related antisense oligo SEQ ID No 129.
 XX KW Antisense compound; tumour necrosis factor receptor 1; liver disease;
 KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
 KW human; ds.
 XX OS Homo sapiens.
 XX FN WO200248168-A1.
 XX PD 20-JUN-2002.
 XX PF 22-OCT-2001; 2001WO-US051224.
 XX PR 24-OCT-2000; 2000US-00695451.
 XX PA (ISIS-) ISIS PHARM INC.
 XX PI Baker BF, Cowsert LM, Zhang H, Dean NM;
 XX DR WPI; 2002-583481/62.
 XX CC The invention relates to an antisense compound 8 to 30 nucleotides in
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor

CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
 CC TNFR1. The antisense compound is useful for inhibiting the expression of
 CC TNFR1 in cells or tissues. The antisense compound is also useful for
 CC treating an animal (preferably human) having a disease or condition
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
 CC the expression of TNFR1. The antisense compound is useful for
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
 CC This polynucleotide sequence represents a human oligonucleotide relating
 CC to the TNFR1 of the invention
 XX SQ Sequence 18 BP; 9 A; 0 C; 7 G; 2 T; 0 U; 0 Other;
 Query Match 24.7%; Score 18; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 58;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 927 TTTATCCCTCCTCTTCAT 944
 DB 18 TTTATCCCTCCTCTTCAT 1
 RESULT 25
 ABT05092/c
 ID ABT05092 standard; DNA; 18 BP.
 XX AC ABT05092;
 XX DT 11-OCT-2002 (first entry)
 XX DE TNFR1 expression modulation related antisense oligo SEQ ID No 122.
 XX KW Antisense compound; tumour necrosis factor receptor 1; liver disease;
 KW TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
 KW human; ds.
 XX OS Homo sapiens.
 XX FN WO200248168-A1.
 XX PD 20-JUN-2002.
 XX PF 22-OCT-2001; 2001WO-US051224.
 XX PR 24-OCT-2000; 2000US-00695451.
 XX PA (ISIS-) ISIS PHARM INC.
 XX PI Baker BF, Cowsert LM, Zhang H, Dean NM;
 XX DR WPI; 2002-583481/62.
 XX CC Novel antisense compound targeted to nucleic acid molecule encoding tumor
 PT necrosis factor receptor 1 (TNFR1), useful for treating humans having
 PT disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
 XX PS Example 18; Page 56; 121pp; English.
 XX CC The invention relates to an antisense compound 8 to 30 nucleotides in
 CC length targeted to nucleic acid molecule encoding tumour necrosis factor
 CC receptor 1 (TNFR1), where the antisense compound inhibits expression of
 CC TNFR1 in cells or tissues. The antisense compound is also useful for
 CC treating an animal (preferably human) having a disease or condition
 CC associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
 CC injury) or a hyperproliferative disorder such as cancer, by inhibiting
 CC the expression of TNFR1. The antisense compound is useful for
 CC diagnostics, therapeutics, prophylaxis and as research reagents and kits.
 CC This polynucleotide sequence represents a human oligonucleotide relating
 CC to the TNFR1 of the invention
 XX SQ Sequence 18 BP; 12 A; 2 C; 3 G; 1 T; 0 U; 0 Other;

```
Query Match      24.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 58;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

/ 905 TCATTTCTTTGGTCTTT 922
  18 TCATTTCTTTGGTCTTT 1

RESULT 26
3705095/C
ABT05095 standard; DNA; 18 BP.
ABT05095;
11-OCT-2002 (first entry)
TNFR1 expression modulation related antisense oligo SEQ ID No 125.
Antisense compound; tumour necrosis factor receptor 1; liver disease;
TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
human; ds.
Homo sapiens.
WO200248168-A1.
20-JUN-2002.
22-OCT-2001; 2001WO-US051224.
24-OCT-2000; 2000US-00695451.
(ISIS-) ISIS PHARM INC.
Baker BF, Cowser LM, Zhang H, Dean NM;
WPI; 2002-583481/62.
Novel antisense compound targeted to nucleic acid molecule encoding tumor
necrosis factor receptor 1 (TNFR1), useful for treating humans having
disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
Example 18; Page 56; 121pp; English.
The invention relates to an antisense compound 8 to 30 nucleotides in
length targeted to nucleic acid molecule encoding tumour necrosis factor
receptor 1 (TNFR1), where the antisense compound inhibits expression of
TNFR1. The antisense compound is useful for inhibiting the expression of
TNFR1 in cells or tissues. The antisense compound is also useful for
treating an animal (preferably human) having a disease or condition
associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
injury) or a hyperproliferative disorder such as cancer, by inhibiting
the expression of TNFR1. The antisense compound is useful for
diagnostics, therapeutics, prophylaxis and as research reagents and kits.
This polynucleotide sequence represents a human oligonucleotide relating
to the TNFR1 of the invention
Sequence 18 BP; 9 A; 2 C; 6 G; 1 T; 0 U; 0 Other;

Query Match      24.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 58;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

/ 917 GTCCTTGCCCTTTATCCC 934
  18 GTCCTTGCCCTTTATCCC 1

RESULT 27
3705104/C
ABT05104 standard; DNA; 18 BP.
ABT05104;
11-OCT-2002 (first entry)
TNFR1 expression modulation related antisense oligo SEQ ID No 134.
Antisense compound; tumour necrosis factor receptor 1; liver disease;
TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
human; ds.
Homo sapiens.
WO200248168-A1.
20-JUN-2002.
22-OCT-2001; 2001WO-US051224.
24-OCT-2000; 2000US-00695451.
(ISIS-) ISIS PHARM INC.
Baker BF, Cowser LM, Zhang H, Dean NM;
WPI; 2002-583481/62.
Novel antisense compound targeted to nucleic acid molecule encoding tumor
necrosis factor receptor 1 (TNFR1), useful for treating humans having
disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.
Example 18; Page 56; 121pp; English.
The invention relates to an antisense compound 8 to 30 nucleotides in
length targeted to nucleic acid molecule encoding tumour necrosis factor
receptor 1 (TNFR1), where the antisense compound inhibits expression of
TNFR1. The antisense compound is useful for inhibiting the expression of
TNFR1 in cells or tissues. The antisense compound is also useful for
treating an animal (preferably human) having a disease or condition
associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver
injury) or a hyperproliferative disorder such as cancer, by inhibiting
the expression of TNFR1. The antisense compound is useful for
diagnostics, therapeutics, prophylaxis and as research reagents and kits.
This polynucleotide sequence represents a human oligonucleotide relating
to the TNFR1 of the invention
Sequence 18 BP; 4 A; 5 C; 5 G; 4 T; 0 U; 0 Other;

Query Match      24.7%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 58;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 954 GTATCGCTACCAACGGTG 971
DB 18 GTATCGCTACCAACGGTG 1

RESULT 28
ABK16809
ID ABK16809 standard; DNA; 24 BP.
ABK16809;
26-MAR-2002 (first entry)
Human protein refolding PCR primer #36.
Protein refolding; growth hormone supergene family; human; mouse; ss;
therapeutic half-life; PCR primer; anti-angiogenesis factor.
Homo sapiens.
WO200187925-A2.
XX
```


PD 22-NOV-2001.
XX
XX
XX 16-MAY-2001; 2001WO-US016088.
XX
XX 16-MAY-2000; 2000US-0204617P.
XX
XX (BOLD-) BOLDER BIOTECHNOLOGY INC.
XX
XX
XX Rosendahl MS, Cox GN, Doherty DH;
XX
XX WPI; 2002-089843/12.
XX
XX Making and refolding insoluble or aggregated proteins having free
XX cysteine by exposing host cell expressing protein to cysteine blocking
XX agent, and exposing to cysteine reactive group to increase their
XX effectiveness.
XX
XX Example 9; Page 39; 110pp; English.
XX
XX The invention relates to a host cell, made to express an insoluble or
XX aggregated protein having free cysteines residues. The cell is then lysed
XX by chemical, enzymatic or physical agents and solubilised by exposing it
XX to a denaturing agent, a reducing agent and a cysteine blocking agent,
XX and is refolded into a biologically active form by reducing the
XX concentrations of denaturing and reducing agents. The protein may belong
XX to the growth hormone supergene family or may be an anti-angiogenesis
XX factor. The method is useful for preparing a refolded, soluble form of an
XX insoluble or aggregated protein. The proteins of the invention can act as
XX delivery vehicles for enhancement of the circulatory half-life of the
XX therapeutics that are attached or for directing delivery of a specific
XX target within the body. Sequences ABK16774-ABK16852 represent PCR primers
XX used in synthesis of the proteins
XX
XX Sequence 24 BP; 4 A; 8 C; 2 G; 10 T; 0 U; 0 Other;
SQ
Query Match 24.1%; Score 17.6; DB 1; Length 24;
Best Local Similarity 83.3%; Pred. No. 84;
Matches 20; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 944 TTGGTTTAAATGATACGGTACCAAC 967
DB 1 TTCTGTTTCTCTATCGTACCAAC 24
RESULT 29
ABZ30031
D ABZ30031 standard; DNA; 25 BP.
AC
AC ABZ30031;
XX
XX 30-JAN-2003 (first entry)
XX
XX Candida albicans GRACE strain PCR primer SEQ ID NO 4182.
XX
XX Fungus; yeast; tetracyclin; promoter; GRACE strain; biosynthesis;
XX signal transduction; DNA replication; cell division; growth;
XX proliferation; Candida albicans; fungicide; antifungal; PCR; primer; ss.
XX
XX Candida albicans.
XX
XX WO200253728-A2.
XX
XX 11-JUL-2002.
XX
XX 26-DEC-2001; 2001WO-US049486.
XX
XX 29-DEC-2000; 2000US-0259128P.
XX
XX 20-FEB-2001; 2001US-00792024.
XX
XX 22-AUG-2001; 2001US-0314050P.
XX
XX (ELIT-) ELITRA PHARM INC.
XX
XX Roemer T, Jiang B, Boone C, Bussey H, Ohlsen KL;
XX

XX
XX
XX WPI; 2002-566694/60.
XX
XX Constructing strains for identifying gene products as effective targets
XX for therapeutic intervention, by inactivating in the strain one allele of
XX a gene and placing other allele of the gene under conditional expression.
XX
XX Claim 36; SEQ ID NO 4182; 167pp + Sequence Listing; English.
XX
XX The invention relates to constructing (M1) a strain of diploid fungal
XX cells in which both alleles of a gene are modified, comprising modifying
XX one allele by insertion or replacement by a cassette having an
XX expressible selectable marker and modifying other allele by
XX recombination, of a promoter replacement fragment with a heterologous
XX promoter, so that expression of the second allele is regulated by the
XX promoter. (M1) is useful for constructing a strain of diploid fungal
XX cells in which both alleles of a gene are modified. The diploid fungal
XX cells having both alleles modified are useful for identifying a gene that
XX is essential to the survival or growth of a fungus, a gene that
XX contributes to the virulence and/or pathogenicity of a fungus, a gene
XX that contributes to the resistance of a diploid fungus to an antifungal
XX agent, an antifungal agent that inhibits the growth of a diploid fungus
XX and for identifying a therapeutic agent for treatment of a mammalian
XX disease. (M1) is useful for identifying a compound which modulates the
XX activity of a gene product, preferably enzymatic activity, carbon
XX compound catabolism, biosynthetic, transporter, transcriptional,
XX translational, signal transduction, DNA replication and cell division
XX activity. The method is useful for identifying a compound having the
XX ability to inhibit growth or proliferation of C. albicans cells and for
XX treating infection by C. albicans. The present sequence is that of a PCR
XX primer used in the method of the invention. Note: The sequence data for
XX this patent is not represented in the printed specification but is based
XX on sequence information supplied to Derwent by the European Patent Office
XX
XX Sequence 25 BP; 0 A; 9 C; 2 G; 14 T; 0 U; 0 Other;
SQ
Query Match 23.3%; Score 17; DB 1; Length 25;
Best Local Similarity 80.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
QY 909 TTTCTTTGGTCTTTGCGCTTTTATCC 933
DB 1 TTCTTCTGCTTTCCCTTGCTCC 25
RESULT 30
ABT05171/c
ID ABT05171 standard; DNA; 20 BP.
XX
XX AC ABT05171;
XX
XX 11-OCT-2002 (first entry)
XX
XX TNFR1 expression modulation related antisense oligo SEQ ID No 201.
XX
XX Antisense compound; tumour necrosis factor receptor 1; liver disease;
XX TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
XX mouse; murine; ds.
XX
XX Mus sp.
XX
XX WO200248168-A1.
XX
XX 20-JUN-2002.
XX
XX 22-OCT-2001; 2001WO-US051224.
XX
XX 24-OCT-2000; 2000US-00695451.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Baker BF, Cowser LM, Zhang H, Dean NM;
XX

WPI; 2002-583481/62.

Novel antisense compound targeted to nucleic acid molecule encoding tumor necrosis factor receptor 1 (TNFR1), useful for treating humans having disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.

Example 21; Page 61; 121pp; English.

The invention relates to an antisense compound 8 to 30 nucleotides in length targeted to nucleic acid molecule encoding tumour necrosis factor receptor 1 (TNFR1), where the antisense compound inhibits expression of TNFR1. The antisense compound is useful for inhibiting the expression of TNFR1 in cells or tissues. The antisense compound is also useful for treating an animal (preferably human) having a disease or condition associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver injury) or a hyperproliferative disorder such as cancer, by inhibiting the expression of TNFR1. The antisense compound is useful for diagnostics, therapeutics, prophylaxis and as research reagents and kits. This polynucleotide sequence represents a mouse oligonucleotide relating to the TNFR1 of the invention

Sequence 20 BP; 9 A; 3 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 21.6%; Score 15.8; DB 1; Length 20;
Best Local Similarity 89.5%; Pred. No. 1.5e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

914 TTGGCTTTGGCTTTATC 932

19 TAGGCTTTGGCTTTATC 1

RESULT 31

WV51522
AAV51522 standard; DNA; 22 BP.

AAV51522;

02-FEB-1999 (first entry)

Zea mays genome forward PCR primer #122.

Polymorphic marker; allele-specific; probe; amplification; PCR primer; hybridisation; plant; hybrid certification; genetic contribution; progeny; back-cross; hybrid; ancestry; corn; ss.

Synthetic.

Zea mays.

WO9824796-A1.

11-JUN-1998.

01-DEC-1997; 97WO-US021782.

02-DEC-1996; 96US-0032069P.

07-MAR-1997; 97US-00813507.

(AFFY-) AFFYMETRIX INC.

Lemieux B, Landry BS, Sapolsky RJ, Murigneux A;

WPI; 1998-333252/29.

Brassica species allele-specific oligonucleotide probes and primers - useful for plant breeding.

Example 1; Page 52; 65pp; English.

AAV51401-V51704 are forward PCR primers used to amplify fragments of the Zea mays genome in order to detect polymorphic markers. Such markers can be used in the construction of allele-specific primers and probes for amplification or hybridisation, e.g. to determine common or disparate

CC ancestry between 2 or more plants, to monitor the genetic contribution of
CC an ancestral plant, to trace the progeny of proprietary plants, in
CC certification of a hybrid plant or to identify the progeny of a back-
CC crossed plant with an ancestral plant

XX Sequence 22 BP; 2 A; 3 C; 7 G; 10 T; 0 U; 0 Other;

Query Match 21.6%; Score 15.8; DB 1; Length 22;

Best Local Similarity 89.5%; Pred. No. 1.6e+02;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 902 TGGTCATTTCTTTGGTCT 920

Db 4 TGGTCATTTCTTTGGTGT 22

RESULT 32

AAAX74507/c

ID AAX74507 standard; RNA; 17 BP.

XX

AC AAX74507;

DT 28-JUL-1999 (first entry)

DE Mouse flt-1 VEGF receptor hammerhead ribozyme substrate #35.

XX Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW foetal liver kinase 1; ss.

OS Mus sp.

XX WO9715662-A2.

XX 01-MAY-1997.

XX 25-OCT-1996; 96WO-US017480.

XX 26-OCT-1995; 95US-0005974P.

PR 11-JAN-1996; 96US-00584040.

XX (RIBO-) RIBOZYME PHARM INC.

PA (CHIR) CHIRON CORP.

PI Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;

XX WPI; 1997-259017/23.

XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT rheumatoid arthritis, etc., in a human patient.

XX Claim 4; Page 156; 218pp; English.

PS The present invention describes nucleic acid molecules which modulate the
CC synthesis, expression and/or stability of a mRNA encoding 1 or more
CC receptors of vascular endothelial growth factor (VEGF). A patient
CC (preferably human) having a condition associated with the level of the
CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC treated by administering the nucleic acid molecule or the expression
CC vector to the patient. AAX67275 to AAX75752 represent specific examples
CC of nucleic acid molecules from the present invention

XX Sequence 17 BP; 7 A; 2 C; 7 G; 0 T; 1 U; 0 Other;

Query Match 21.1%; Score 15.4; DB 1; Length 17;

Best Local Similarity 94.1%; Pred. No. 1.6e+02;
Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 921 TTGCTTTTATCCCTCC 937
 DB 17 TTGCTTTTATCCCTCC 1

RESULT 33
 ACD50663
 ID ACD50663 standard; RNA; 17 BP.
 XX
 AC ACD50663;
 XX
 DT 23-SEP-2003 (first entry)
 XX
 DE HBV hammerhead ribozyme substrate sequence #180.
 XX
 KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
 KW RNA stability; RNA expression; RNA synthesis; antisense;
 KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;
 KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;
 KW HBV reverse transcriptase; Enhancer I region; viral replication;
 KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
 KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
 KW virucide; antiinflammatory; substrate; ss.
 XX
 OS Hepatitis B virus.
 XX
 PN WO200281494-A1.
 XX
 PD 17-OCT-2002.
 XX
 FF 26-MAR-2002; 2002WO-US009187.
 XX
 PR 26-MAR-2001; 2001US-00817879.
 PR 08-JUN-2001; 2001US-00877478.
 PR 08-JUN-2001; 2001US-0296876P.
 PR 24-OCT-2001; 2001US-0335059P.
 PR 05-DEC-2001; 2001US-0337055P.
 XX
 FA (RIBO-) RIBOZYME PHARM INC.
 FA (BLAT/) BLATT L.
 FA (MACE/) MACEJAK D.
 FA (MCSW/) MCSWIGGEN J.
 FA (MORR/) MORRISSEY D.
 FA (PACV/) PAVCO P.
 FA (LEEP/) LEE P.
 FA (DRAP/) DRAPER K.
 FA (ROBE/) ROBERTS E.
 XX
 PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
 PI Draper K, Roberts E;
 XX
 DR WPI; 2003-229207/22.
 XX
 PT Novel compound useful for treating cirrhosis, liver failure,
 PT hepatocellular carcinoma, or condition associated with hepatitis C virus
 PT infection.
 XX
 PS Example 1; Page 139; 387pp; English.
 XX

The present invention relates to nucleic acid molecules which modulate
 the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
 Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
 and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
 inozymes, zinzymes, amberyne, and G-cleaver ribozymes. Also disclosed
 are nucleic acid decoy molecules and aptamers that bind to HBV reverse
 transcriptase and/or HBV reverse transcriptase primer sequences, as well
 as oligonucleotides that specifically bind the Enhancer I region of HBV
 DNA. The nucleic acids may be used to modulate the expression of HBV
 genes and HBV viral replication. Also disclosed is a method for screening
 compounds and/or potential therapies directed against HBV, and compounds
 that modulate the expression and/or replication of HCV. The compounds and
 methods of the invention are useful for the treatment of degenerative and
 disease states related to HBV and HCV infection, replication and gene

CC expression such as cirrhosis, liver failure, and hepatocellular
 CC carcinoma. The present sequence represents a substrate for one of the HBV
 CC ribozyme, inozyme, G-cleaver, zinzyme, DNazyme or amberyne sequences
 CC disclosed in the present invention
 XX
 SQ Sequence 17 BP; 1 A; 2 C; 2 G; 0 T; 12 U; 0 Other;
 Query Match 21.1%; Score 15.4; DB 1; Length 17;
 Best Local Similarity 29.4%; Pred. No. 1.6e+02;
 Matches 5; Conservative 11; Mismatches 1; Indels 0; Gaps 0;
 QY 907 ATTTTCTTTGTCCTTG 923
 DB 1 AUUUUUUUUUUUUUU 17

RESULT 34
 AAF56086/c
 ID AAF56086 standard; DNA; 20 BP.
 XX
 AC AAF56086;
 XX
 DT 18-APR-2001 (first entry)
 XX
 DE HBV DNA polymerase gene PCR primer HBPr135B.
 XX
 KW HBV; hepatitis B virus; DNA polymerase gene; anti-HBV drug resistance;
 KW mutation detection; PCR primer; ss.
 XX
 OS Hepatitis B virus.
 XX
 PN WO200104358-A2.
 XX
 PD 18-JAN-2001.
 XX
 PF 05-JUL-2000; 2000WO-EP006306.
 PR 08-JUL-1999; 99EP-00870148.
 PR 13-JUL-1999; 99US-0143546P.
 XX
 PA (INNO-) INNOGENETICS NV.
 PI Stuyver L, Maertens G, Van Geyt C;
 XX
 DR WPI; 2001-138370/14.
 XX
 PT Monitoring anti-HBV drug resistance by genetic detection of mutations in
 PT DNA polymerase of HBV in patient's sample, involves hybridizing the
 PT polynucleic acids of the sample with a probe and detecting the hybrid.
 XX
 PS Claim 4; Page 12; 64pp; English.
 XX

The present sequence is a primer used in a method for monitoring anti-
 hepatitis B virus (HBV) drug resistance in a patient by genetic detection
 of any one of mutations L528M, M552V/I and/or V/L/M555I in HBV DNA
 CC polymerase in a biological sample from the patient. The method is useful
 CC in the field of genetic detection of anti-HBV drug resistance during HBV
 CC therapy. The method is rapid, reliable and precise
 XX
 SQ Sequence 20 BP; 12 A; 2 C; 4 G; 2 T; 0 U; 0 Other;
 Query Match 21.1%; Score 15.4; DB 1; Length 20;
 Best Local Similarity 94.1%; Pred. No. 1.8e+02;
 Matches 16; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 907 ATTTTCTTTGTCCTTG 923
 DB 17 ATTTTCTTTGTCCTTG 1

RESULT 35
 ABZ24499/c
 ID ABZ24499 standard; DNA; 23 BP.

ABZ24499;
 21-MAR-2003 (first entry)
 Mouse Oct 3/4 forward PCR primer.
 Stem cell; tissue transplantation; mouse; Oct 3/4; PCR; primer; ss.
 Mus sp.
 WO200297065-A2.
 05-DEC-2002.
 31-MAY-2002; 2002WO-GB002691.
 31-MAY-2001; 2001GB-00013118.
 (INTE-) INTERCYTEX LTD.
 Johnson PA, Wolowacz RG;
 WPI; 2003-140464/13.
 Producing mammalian stem cells from target mammalian somatic cells by introducing a medium which includes extract comprising soluble components of cytoplasm and nuclear factors of reprogramming cells, into a target cell.
 Disclosure; Page 44; 90pp; English.
 The present invention relates to methods of producing pluripotent mammalian stem cells by reprogramming target somatic cells by introducing into the target cell a medium which includes an extract comprising soluble components of the cytoplasm and nuclear factors or reprogramming cells, where the extract is enriched for the nuclear factors. The reprogramming cell is a germ cell, e.g. an egg cell or an embryonal carcinoma (EC) cell. The target cell is a thymocyte, peripheral blood lymphocyte, epidermal cell, buccal cavity cell, cumulus cell, bone marrow stem cell, nervous system stem cell or gut stem cell, or is obtained from established cell lines, tissues or organs of an adult mammal. Methods of inducing differentiation of a stem cell and of producing tissue from a stem cell are also provided. The stem cell can be used to produce neural, smooth muscle, striated muscle, cardiac muscle, bone, cartilage, liver, kidney, respiratory epithelium, haematopoietic cells, spleen, skin, stomach and intestine tissue. The tissue can be used to treat a condition or disease requiring transplantation of tissue. The stem cells can also be used to screen components with potential to treat disease. The present sequence is that of a forward PCR primer for mouse Oct 3/4, a gene characteristically expressed in pluripotent cells. Successful reprogramming of target somatic cells by treatment with EC cell extracts or xenopus egg extracts was assessed by determining expression of such genes using a Ragman Real-time PCR method. Oct 3/4 expression was detected in mouse EC cells but not in mouse thymocytes. The primer was gene- and species-specific
 Sequence 23 BP; 11 A; 3 C; 7 G; 2 T; 0 U; 0 Other;
 Query Match 20.8%; Score 15.2; DB 1; Length 23;
 Best Local Similarity 85.0%; Pred. No. 2.1e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 920 TTTCCTTTTATCCCTCCCTC 939
 20 TGTGCTTTTAACTCCCTCC 1
 RESULT 36
 ABZ68856/c
 ABZ68856 standard; DNA; 23 BP.
 ABZ68856;

XX 28-MAY-2003 (first entry)
 DT Forward PCR primer for murine Oct 3/4 cDNA fragment.
 DE Fused cell; porous filter; pluripotent cell; undifferentiated cell;
 XX Oct 3/4; PCR; primer; ss.
 KW Mus sp.
 XX WO2003014337-A2.
 XX 20-FEB-2003.
 XX 02-AUG-2002; 2002WO-GB003570.
 XX 03-AUG-2001; 2001GB-00018984.
 PR (INTE-) INTERCYTEX LTD.
 PA (ANDR/) ANDREWS P W.
 PA (SHER/) SHERING A F.
 PA (FLAS/) FLASZA M A.
 XX Andrews PW, Shering AF, Flasz MA;
 PI WPI; 2003-268198/26.
 DR Producing a fused cell by providing a porous filter, allowing a first or
 XX second parent cell to attach to either side of the porous filter,
 PT respectively, and causing fusion of the cell membranes through the pores
 of the porous filter.
 XX Disclosure; Page 43; 82pp; English.
 PS The specification describes a method for producing a fused cell. The
 XX method comprises providing a porous filter; allowing a first parent cell
 CC to attach to one side of the porous filter; and a second parent cell to
 CC attach to the other side of the porous filter; and causing fusion of the
 CC cell membranes through the pores of the porous filter so that the cell
 CC cytoplasm are contiguous through the porous filter while the chromosomes
 CC of the parent cells remain separated by the porous filter. The method is
 CC useful for producing a fused cell. The method may also be used in a
 CC method for assessing reprogramming of a target cell or may be used in
 CC cell reprogramming where a pluripotent undifferentiated cell is fused
 CC with a differentiated target cell to give a deprogrammed target cell with
 CC the same genetic constituency as the original target cell. PCR primers
 CC ABZ68856-57 and probe ABZ68858 were used to amplify and detect, in the
 CC respectively, murine Oct 3/4 cDNA from fused and parent cells, in the
 CC course of the invention
 XX Sequence 23 BP; 11 A; 3 C; 7 G; 2 T; 0 U; 0 Other;
 SQ Query Match 20.8%; Score 15.2; DB 1; Length 23;
 Best Local Similarity 85.0%; Pred. No. 2.1e+02;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 920 TTTCCTTTTATCCCTCCCTC 939
 20 TGTGCTTTTAACTCCCTCC 1
 Db
 RESULT 37
 AAV10706/c
 ID AAV10706 standard; DNA; 19 BP.
 XX AAV10706;
 AC AAV10706;
 XX 21-JUL-1998 (first entry)
 DT Human breast cancer gene CHI-9a11-2 primer pchl-t7-5f.
 DE Breast cancer; malignant transformation; diagnostic; therapeutic;
 XX screening; primer; ss.
 KW

```

XX  Synthetic.
QS  Homo sapiens.
XX  WO9738085-A2.
XX  16-OCT-1997.
XX  09-APR-1997; 97WO-US005930.
XX  10-APR-1996; 96US-0015167P.
XX  05-JUN-1996; 96WO-US009286.
XX  06-JUN-1996; 96US-0019202P.
XX  11-JUL-1996; 96US-00678280.
XX  (CALP-) CALIFORNIA PACIFIC MEDICAL CENT RES INST.
FA  Smith H, Chen L;
XX  WPI; 1997-512705/47.
XX  Breast cancer genes - used to develop products to design or screen
XX  diagnostic reagents or therapeutic compounds.
XX  Disclosure; Fig 7; 118pp; English.
XX  AAV10702-V10719 are primers used in a method to identify the novel human
XX  breast cancer gene CHI-9all-2 by differential display. The identified
XX  genes or fragments of these genes can be used for identifying genes and
XX  gene products that are intimately related to malignant transformation or
XX  maintenance of the malignant properties of cancer cells. It can also be
XX  used to design or screen diagnostic reagents or therapeutic compounds.
XX  CC Kits are included within the scope of the invention
XX  SQ Sequence 19 BP; 7 A; 2 C; 8 G; 1 T; 0 U; 1 Other;
      Query Match 20.5%; Score 15; DB 1; Length 19;
      Best Local Similarity 100.0%; Pred. No. 2e+02;
      Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 928 TTATCCCTCCTCTTC 942
Db 18 TTATCCCTCCTCTTC 4

RESULT 38
AAV14301/c
ID AAV14301 standard; DNA; 20 BP.
AC AAV14301;
XX 27-AUG-2003 (revised)
DT 19-MAY-1998 (first entry)
XX Probe HBPr135 for Hepatitis b virus.
XX
XX Probe; hepatitis b virus; HBV detection; RT pol region; genetic analysis;
XX preCore region; HBsAg region; genotype specific target;
XX mutation detection; ss.
XX Synthetic.
XX Hepatitis B virus.
XX WO9740193-A2.
XX 30-OCT-1997.
XX 21-APR-1997; 97WO-EP002002.
XX 19-APR-1996; 96EP-00870053.
XX (INNO-) INNOGENETICS NV.
XX

```

```

PI Stuyver L, Rossau R, Maertens G;
XX WPI; 1997-535867/49.
XX
XX Detection and/or genetic analysis of hepatitis B virus - specifically
XX genotype, preCore mutations, vaccine escape mutations and RT gene
XX mutations selected by treatment with drugs.
XX Example 1; Page 29; 80pp; English.
XX
XX This sequence represents a probe for hepatitis b virus (HBV), used in the
XX method of the invention for detection and/or genetic analysis of
XX hepatitis B virus (HBV) in a sample. The method comprises: (a) optionally
XX releasing, isolating or concentrating polynucleic acids (I) in the
XX sample, and amplifying the relevant part of a suitable HBV gene in the
XX combination of at least 2 nucleotide probes, which are applied to known
XX locations on a solid support and hybridise specifically to mutant target
XX sequences chosen from the HBV RT pol gene region, HBV preCore region,
XX HBsAg region and/or HBV genotype specific target sequences, or their
XX complements or U for T homologues; (c) detecting the hybrids formed in
XX step (b), and inferring the HBV genotype and/or mutants present in the
XX sample from the differential hybridisation signal(s). The composition can
XX be used to diagnose and/or monitor HBV mutants and/or genotypes in a
XX sample, specifically genotype, preCore mutations, vaccine escape
XX mutations and RT gene mutations selected by treatment with drugs, e.g.
XX lamivudine and penciclovir. (Updated on 27-AUG-2003 to correct OS field.)
XX SQ Sequence 20 BP; 11 A; 2 C; 4 G; 2 T; 0 U; 1 Other;
      Query Match 20.5%; Score 15; DB 1; Length 20;
      Best Local Similarity 88.2%; Pred. No. 2.1e+02;
      Matches 15; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 907 ATTTCTTTTGTCTTTG 923
Db 17 ATTTCTTTTGTCTVTG 1

RESULT 39
AAAD09117/c
ID AAD09117 standard; DNA; 20 BP.
XX
XX AAD09117;
XX
XX 04-SEP-2001 (first entry)
XX Hepatitis B virus genotype G DNA amplifying primer HBPr135.
XX
XX HBV genotype G; precore; HBpol; polymerase; envelope protein; preS1;
XX preS2; surface antigen; HBsAg; HBX protein; vaccine; liver disease;
XX hepatitis; liver cancer; HBcAg; core antigen; PCR primer; ss.
XX Hepatitis B virus.
XX WO200138498-A2.
XX 31-MAY-2001.
XX 21-NOV-2000; 2000WO-US032108.
XX 24-NOV-1999; 99US-0167206P.
XX (PHAR-) PHARMASSET INC.
XX (INNO-) INNOGENETICS NV.
XX
XX Stuyver L, Schinazi R, De Gendt S, Van Geyt C, Zoulim F, Fried M;
XX Rossau R;
XX WPI; 2001-367676/38.
XX
XX Novel hepatitis B virus genotype G, nucleic acids encoding virus,
XX polypeptides encoded by nucleic acids, useful for preparing vaccine to
XX

```

CC treat or prevent the hepatitis B virus genotype G infection in a subject.
 CC Example; Page 39; 84pp; English.

CC The present invention relates to hepatitis B virus (HBV) strain PRL1,
 CC genotype G DNA encoding PreCore/Core protein, HbPol, envelope (PreS1,
 CC PreS2 and surface antigen HBSAg) and HBx proteins. HBV genotype G nucleic
 CC acids and polypeptides are useful for diagnosing, prognosing and treating
 CC infections caused by HBV genotype G. They can be used in a vaccine to
 CC treat or prevent HBV genotype G infection. The HBV genotype G derived
 CC nucleic acids and antibodies are useful for detecting HBV genotype G in a
 CC sample or diagnosis of HBV genotype G infection. The presence of HBV
 CC genotype G statistically correlates with the presence of liver damage
 CC and/or liver cancer in the subject. The HBV genotype G core insert
 CC peptide encoding nucleic acid is useful for designing monitoring assays
 CC to study and predict the evolution of anti-HBe and anti-HBc antibodies
 CC and HBeAg (genotype G e antigen) in patients infected with HBV. The
 CC antibodies or antigens of HBV genotype G are useful for identifying a
 CC stage of liver disease caused by HBV genotype G. The present sequence is
 CC a PCR primer used to amplify hepatitis B virus (HBV) genotype G DNA
 CC fragment

CC Sequence 20 BP; 11 A; 2 C; 4 G; 2 T; 0 U; 1 Other;

Query Match 20.5%; Score 15; DB 1; Length 20;
 Best Local Similarity 88.2%; Pred. No. 2.1e+02;

Matches 15; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

907 ATTTCTTTGGTCTTGG 923

17 ATTTCTTTGGTCTTGG 1

RESULT 40

AAH77555/c

AAH77555 standard; DNA; 20 BP.

AAH77555;

19-OCT-2001 (first entry)

HBV HbPol/HBSAg region antisense primer HBP1r 135.

Hepatitis B virus; HBV; preCore; Core; preS1; preS2; HBS; HBx; HBPOL;
 HBsAg; antiviral; vaccine; genotype G; genotyping; HBCAg; HBeAg;
 PCR primer; ss.

Hepatitis B virus.

WO200140279-A2.

07-JUN-2001.

20-NOV-2000; 2000WO-BF011526.

03-DEC-1999; 99BP-00870252.

07-DEC-1999; 99US-0169287P.

(INNO-) INNOGENETICS NV.

Stuyver L, Van Geyt C, De Gendt S;

WPI; 2001-374785/39.

Novel isolated and/or purified hepatitis B virus polypeptide and
 polynucleotide sequences that are phylogenetically different from HBV
 genotype A-F molecules, useful for HBV diagnosis, prophylaxis and
 therapy.

Example 1; Page 10; 94pp; English.

The invention relates to the complete nucleic acid sequence of a new
 human hepatitis B virus (HBV) genotype, provisionally named genotype G.

CC This genotype was found with a high prevalence in patients chronically
 CC infected with HBV and residing in Europe and the USA. The invention
 CC relates to a fully defined sequence of 3248 nucleotides as given in
 CC specification, a sequence with 92% identity to the given sequence, or
 CC sequence that is degenerate to the mentioned sequences. These
 CC polynucleotides are useful for HBV genotyping. The proteins encoded by
 CC the polynucleotides are useful for detecting antibodies in a biological
 CC sample. Ligands that bind to the proteins and antibodies directed against
 CC the proteins are useful for detecting the proteins and for detecting
 CC HBeAg and HBeAg (precursor proteins). They are also useful for
 CC preparing a vaccine or medicament for treating HBV infections. The
 CC present sequence is one of a number of primers used to amplify HBV DNA in
 CC examples demonstrating HBV genotyping and the detection of HBV genotype G
 CC Sequence 20 BP; 11 A; 2 C; 4 G; 2 T; 0 U; 1 Other;

Query Match 20.5%; Score 15; DB 1; Length 20;

Best Local Similarity 88.2%; Pred. No. 2.1e+02;

Matches 15; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

907 ATTTCTTTGGTCTTGG 923

17 ATTTCTTTGGTCTTGG 1

RESULT 41

AAH78929

AAH78929 standard; DNA; 23 BP.

AAH78929;

03-FEB-1998 (first entry)

Human immunodeficiency virus gag gene RT-PCR primer.

Hepatitis B virus; HBV; detection; reverse transcriptase; RT-PCR primer;
 viral concentration; human immunodeficiency virus; HIV; quantitation; ss.

Synthetic.

Human immunodeficiency virus.

WO9717465-A1.

15-MAY-1997.

05-NOV-1996; 96WO-FR001736.

06-NOV-1995; 95FR-00013093.

(MICR-) MICRODIAG.

Andrieu J;

WPI; 1997-281052/25.

Detection and quantitation of microorganisms by measuring nucleic acid
 content - relative to that in known amount of the organism processed in
 parallel as external standard, e.g. for quantification of viral
 concentration.

Example 2; Page 15; 63pp; French.

Reverse transcriptase PCR primers (AAH78928-9) were used to amplify DNA
 from human immunodeficiency virus (HIV), gag gene, in a new method for
 the quantitation and detection of a microorganism that contains RNA or
 DNA, using an external standard. The method comprises: use or
 determination of a standard concentration of microorganisms, or of DNA or
 RNA carried by them; and comparing the quantity of the product of reverse
 transcription and/or amplification of the nucleic acid produced by an
 unknown concentration of microorganism with the quantity of amplification
 product from the standard. The target microorganism, or its genome, being
 measured is identical to the standard, and the sample and standard are
 processed in parallel. The method is used to quantify microorganisms e.g.


```
Best Local Similarity 81.0%; Pred. No. 2.5e+02;
Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

/ 917 GTCCTTGGCTTTTATCCCTCC 937
| | | | | | | | | | | | | | |
\ 1 GCGTATGCCCTTTATTCCTCC 21

RESULT 48
ID50662
ACD50662 standard; RNA; 17 BP.
ACD50662;
23-SEP-2003 (first entry)
HBV hammerhead ribozyme substrate sequence #179.

Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
RNA stability; RNA expression; RNA synthesis; antisense;
enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;
amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
HBV reverse transcriptase; Enhancer I region; viral replication;
degenerative; disease state; HBV infection; HCV infection; cirrhosis;
liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
virucide; antiinflammatory; substrate; ss.
Hepatitis B virus.
WO200281494-A1.
17-OCT-2002.
26-MAR-2002; 2002WO-US009187.
26-MAR-2001; 2001US-00817879.
08-JUN-2001; 2001US-00877478.
08-JUN-2001; 2001US-0296876P.
24-OCT-2001; 2001US-0335059P.
05-DEC-2001; 2001US-0337055P.
(RIBO-) RIBOZYME PHARM INC.
(BLAT/) BLATT L.
(MACE/) MACEJAK D.
(MCSW/) MCSWIGGEN J.
(MORR/) MORRISSEY D.
(PAVC/) PAVCO P.
(LEEP/) LEE P.
(DRAP/) DRAPER K.
(ROBE/) ROBERTS E.
Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
Draper K, Roberts E;
WPI; 2003-229207/22.
Novel compound useful for treating cirrhosis, liver failure,
hepatocellular carcinoma, or condition associated with hepatitis C virus
infection.
Example 1; Page 139; 387pp; English.

The present invention relates to nucleic acid molecules which modulate
the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
are nucleic acid decoy molecules and aptamers that bind to HBV reverse
transcriptase and/or HBV reverse transcriptase primer sequences, as well
as oligonucleotides that specifically bind the Enhancer I region of HBV
DNA. The nucleic acids may be used to modulate the expression of HBV
genes and HBV viral replication. Also disclosed is a method for screening
compounds and/or potential therapies directed against HBV, and compounds
```

```
CC that modulate the expression and/or replication of HCV. The compounds and
CC methods of the invention are useful for the treatment of degenerative and
CC disease states related to HBV and HCV infection, replication and gene
CC expression such as cirrhosis, liver failure, and hepatocellular
CC carcinoma. The present sequence represents a substrate for one of the HBV
CC ribozyme, inozyme, G-cleaver, zinzyme, DNazyme or amberzyme sequences
CC disclosed in the present invention
XX
SQ Sequence 17 BP; 2 A; 2 C; 1 G; 0 T; 12 U; 0 Other;

Query Match 19.7%; Score 14.4; DB 1; Length 17;
Best Local Similarity 25.0%; Pred. No. 2.3e+02;
Matches 4; Conservative 11; Mismatches 1; Indels 0; Gaps 0;

QY 907 ATTTCCTTGGCTCTTT 922
|:::|:::|:::|:::
Db 2 AUUUUUUUUUUUUUUU 17

RESULT 49
ACD50664
ID ACD50664 standard; RNA; 17 BP.
XX
AC ACD50664;
XX
DT 23-SEP-2003 (first entry)
XX
DE HBV hammerhead ribozyme substrate sequence #181.
XX
KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW RNA stability; RNA expression; RNA synthesis; antisense;
KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;
KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW HBV reverse transcriptase; Enhancer I region; viral replication;
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW virucide; antiinflammatory; substrate; ss.
XX
OS Hepatitis B virus.
XX
PN WO200281494-A1.
XX
PD 17-OCT-2002.
XX
PF 26-MAR-2002; 2002WO-US009187.
XX
PR 26-MAR-2001; 2001US-00817879.
PR 08-JUN-2001; 2001US-00877478.
PR 08-JUN-2001; 2001US-0296876P.
PR 24-OCT-2001; 2001US-0335059P.
PR 05-DEC-2001; 2001US-0337055P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MACE/) MACEJAK D.
PA (MCSW/) MCSWIGGEN J.
PA (MORR/) MORRISSEY D.
PA (PAVC/) PAVCO P.
PA (LEEP/) LEE P.
PA (DRAP/) DRAPER K.
PA (ROBE/) ROBERTS E.
XX
PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
PI Draper K, Roberts E;
DR WPI; 2003-229207/22.
XX
PT Novel compound useful for treating cirrhosis, liver failure,
PT hepatocellular carcinoma, or condition associated with hepatitis C virus
PT infection.
XX
PS Example 1; Page 139; 387pp; English.
XX
```

CC The present invention relates to nucleic acid molecules which modulate
 CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
 CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
 CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
 CC inozymes, zinzymes, amberyemes, and G-cleaver ribozymes. Also disclosed
 CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
 CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
 CC as oligonucleotides that specifically bind the Enhancer I region of HBV
 CC DNA. The nucleic acids may be used to modulate the expression of HBV
 CC genes and HBV viral replication. Also disclosed is a method for screening
 CC compounds and/or potential therapies directed against HBV, and compounds
 CC that modulate the expression and/or replication of HCV. The compounds and
 CC methods of the invention are useful for the treatment of degenerative and
 CC disease states related to HBV and HCV infection, replication and gene
 CC expression such as cirrhosis, liver failure, and hepatocellular
 CC carcinoma. The present sequence represents a substrate for one of the HBV
 CC ribozyme, inozyme, G-cleaver, zinzyme, DNazyme or amberyeme sequences
 CC disclosed in the present invention
 XX
 SQ Sequence 17 BP; 0 A; 2 C; 3 G; 0 T; 12 U; 0 Other;

Query Match 19.7%; Score 14.4; DB 1; Length 17;
 Best Local Similarity 25.0%; Pred. No. 2.3e+02;
 Matches 4; Conservative 11; Mismatches 1; Indels 0; Gaps 0;

Qy 908 TTTTCTTTGGCTTTG 923

Db ::::|:::|:::|
 1 UUUUUUUUGUCUUUG 16

RESULT 50

AAV22562/c
 ID AAV22562 standard; DNA; 20 BP.

XX

AC AAV22562;

XX

DT 08-JUL-1998 (first entry)

XX

DE Antisense oligonucleotide designed to target the R1 message.

XX

KW R1 subunit; ribonucleotide reductase; cell proliferation; tumour cell;
 KW antisense; growth; inhibition; sensitivity; hydroxyurea;
 KW chemotherapeutic drug; methotrexate; PALA; treatment; ss.

XX

CS Synthetic.

CS Homo sapiens.

XX

FN WO9805769-A2.

XX

PD 12-FEB-1998.

XX

PF 01-AUG-1997; 97WO-CA000540.

XX

PR 02-AUG-1996; 96US-0023040P.

XX

PR 07-MAR-1997; 97US-0039959P.

XX

PA (GENE-) GENESENSE TECHNOLOGIES INC.

XX

PI Wright JA, Young AH;

XX

DR WPI; 1998-145609/13.

XX

PT Antisense oligonucleotides to ribonucleotide reductase genes - used to

PT modulate tumour growth and inhibit tumour cell proliferation.

XX

PS Claim 8; Page 48; 79pp; English.

XX

CC AAV22531-89 represent antisense oligonucleotides which are targeted
 CC against the mRNA of the R1 subunit sequence of ribonucleotide reductase.
 CC Aberrant expression of the R2 gene, which encodes the second subunit of
 CC the ribonucleotide reductase gene, can determine the malignant
 CC characteristics of cells. Suppression of R2 and R1 gene expression was
 CC found to reduce transformed properties of tumour cells. The antisense

CC oligonucleotides can be used for modulating tumour cell growth, or for
 CC inhibiting tumour cell proliferation. They can also be used for
 CC increasing the sensitivity of neoplastic cells to chemotherapeutic drugs
 CC (especially to hydroxyurea, methotrexate (MTX), and PALA). The antisense
 CC oligonucleotides may be used to treat proliferative disorders including
 CC leukaemias, lymphomas, sarcomas, melanomas, various other forms of
 CC cancer, papillomas, arthrosclerosis, psoriasis, polythemia, mastocytosis,
 CC autoimmune diseases, angiogenesis, bacterial infections and viral
 CC infections (including HIV hepatitis, or herpes infections)
 XX
 SQ Sequence 20 BP; 12 A; 3 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 19.7%; Score 14.4; DB 1; Length 20;

Best Local Similarity 93.8%; Pred. No. 2.6e+02;

Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 908 TTTTCTTTGGCTTTG 923

Db ::::|:::|:::|
 18 TTTTCTTTGCTTTG 3

RESULT 51

AAA90791/c

ID AAA90791 standard; DNA; 20 BP.

XX

AC AAA90791;

XX

DT 20-DEC-2000 (first entry)

XX

DE Ribonucleotide reductase R1 message antisense oligo AS-I-1162-20.

XX

KW Antisense oligonucleotide; ribonucleotide reductase; R1 protein;

KW R2 protein; tumour cell proliferation inhibition; cancer; cytostatic; ss.

XX

CS Synthetic.

XX

PN WO200047733-A1.

XX

PD 17-AUG-2000.

XX

PF 09-FEB-2000; 2000WO-CA000120.

XX

PR 11-FEB-1999; 99US-00249730.

XX

PA (GENE-) GENESENSE TECHNOLOGIES INC.

XX

PI Wright JA, Young AH;

XX

DR WPI; 2000-558216/51.

XX

PT New antisense oligonucleotide, AS-I-618-20, is useful for inhibiting

PT tumor cell growth.

XX

PS Example 3; Page 31; 137pp; English.

XX

CC The present sequence is an antisense oligonucleotide directed against the
 CC mRNA encoding the R1 component of mammalian ribonucleotide reductase.

CC Ribonucleotide reductase catalyses the conversion of ribonucleotides to

CC their corresponding deoxyribonucleotides and thus plays an important role

CC in DNA synthesis and cell proliferation. Regulation of ribonucleotide

CC reductase is altered in cultured malignant cells and increased levels of

CC R2 protein and R2 mRNA have been found in pre-malignant and malignant

CC tissues as compared to normal control tissue samples. The present

CC antisense sequence is therefore useful for inhibiting tumourigenicity of

CC neoplastic cells and inhibiting metastasis of tumour cells. It is also

CC useful for increasing sensitivity of neoplastic cells to chemotherapeutic

CC drugs, thus allowing chemotherapeutic treatments to be used in patients

CC who have become resistant or less sensitive to chemotherapy. The sequence

CC may be RNA or DNA and may comprise a modified backbone and/or nucleotide

CC analogues

XX

SQ Sequence 20 BP; 12 A; 3 C; 4 G; 1 T; 0 U; 0 Other;

```

Query Match      19.7%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 2.6e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

/ 908 TTTTCTTGGTCTTTG 923
  ||||| ||||| |||||
  18 TTTTCTTGGTCTTTG 3

RESULT 52
AAV51523
  AAV51523 standard; DNA; 22 BP.
  AAV51523;
  02-FEB-1999 (first entry)
  Zea mays genome forward PCR primer #123.
  Polymorphic marker; allele-specific; probe; amplification; PCR primer;
  hybridisation; plant; hybrid certification; genetic contribution;
  progeny; back-cross; hybrid; ancestry; corn; ss.
  Synthetic.
  Zea mays.
  WO9824796-A1.
  11-JUN-1998.
  01-DEC-1997; 97WO-US021782.
  02-DEC-1996; 96US-0032069P.
  07-MAR-1997; 97US-00813507.
  (AFPY-) AFFYMETRIX INC.
  Lemieux B, Landry BS, Sapolsky RJ, Murigneux A;
  WPI; 1998-333252/29.
  Brassica species allele-specific oligonucleotide probes and primers -
  useful for plant breeding.
  Example 1; Page 52; 65pp; English.
  AAV51401-V51704 are forward PCR primers used to amplify fragments of the
  Zea mays genome in order to detect polymorphic markers. Such markers can
  be used in the construction of allele-specific primers and probes for
  amplification or hybridisation, e.g. to determine common or disparate
  ancestry between 2 or more plants, to monitor the genetic contribution of
  an ancestral plant, to trace the progeny of proprietary plants, in
  certification of a hybrid plant or to identify the progeny of a back-
  crossed plant with an ancestral plant
  Sequence 22 BP; 4 A; 3 C; 7 G; 8 T; 0 U; 0 Other;

Query Match      19.7%; Score 14.4; DB 1; Length 22;
Best Local Similarity 93.8%; Pred. No. 2.8e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

  903 GGTCTTTCTTTGGT 918
  ||||| ||||| |||||
  6 GGTCTTTCTTTGGT 21

RESULT 53
AAI6173/c
  AAI6173 standard; DNA; 19 BP.
  AAI6173;
  19-NOV-2001 (first entry)

XX Bacterial cell identifying PCR lower primer #1.
DE Best Local Similarity 84.2%; Pred. No. 2.7e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
KW Cell isolation; bacterial cell; non-specific ligand; eukaryotic parasite;
KW PCR primer; ss.
XX Bacteria.
XX WO200153525-A2.
XX PN 26-JUL-2001.
XX XX
XX 22-JAN-2001; 2001WO-GB000240.
XX XX
XX 21-JAN-2000; 2000GB-00001450.
XX XX
XX (GENP-) GENPOINT AS.
XX PA (GARD/) GARDNER R.
XX XX
XX Refseth UH, Kolpus T;
XX WPI; 2001-541431/60.
XX XX
XX Isolating cells from a sample, particularly bacterial cell, comprises
XX binding the cells to a solid support by means of a non-specific ligand
XX immobilized on the solid support.
XX Example 2; Page 29; 77pp; English.
XX The present invention relates to a method for isolating cells from a
XX sample comprising binding the cells to a solid support using a non-
XX specific ligand immobilised on the solid support. The method is useful
XX for isolating a wide variety of microorganisms, specifically bacteria, in
XX a sample. The method may also be used in the isolation of eukaryotic
XX parasites, particularly those which are able to bind the complex
XX polysaccharides found on human cell, to isolate simultaneously bacteria
XX and other types of microorganism, such as algae, protozoa, fungi or
XX viruses, or to capture all types of white blood cells from a blood or
XX blood derived sample, from bone marrow or any tissue or fluid containing
XX white blood cells. The present sequence is a PCR primer which is used for
XX identification of isolated bacteria
XX Sequence 19 BP; 8 A; 5 C; 4 G; 2 T; 0 U; 0 Other;

Query Match      19.5%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 2.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 937 CTCCTTCATGGTTTAATGT 955
  ||||| ||||| |||||
  19 CTCCTTCATGGTTTAATGT 1
Db

RESULT 54
AAV11921/c
  AAV11921 standard; DNA; 20 BP.
  AC AAV11921;
  XX XX
  XX 13-AUG-1998 (first entry)
  XX XX
  DE Hepatocyte growth factor inhibiting oligonucleotide #13.
  XX Hepatocyte growth factor; HGF; c-Met; modulator; inhibitor;
  KW antitumour agent; anti-metastasis agent; primer; ss.
  XX Synthetic.
  OS
  XX JP10127286-A.
  XX PN
  XX 19-MAY-1998.
  PD
  XX 01-NOV-1996; 96JP-00291499.
  PF

```

```
XX 01-NOV-1996; 96JP-00291499.
XX (TERU ) TERUMO CORP.
XX WPI; 1998-340665/30.
XX Oligo:nucleotide inhibiting HGF production - useful as antitumour and
XX anti-metastatic agent.
XX Claim 8; Page 10; 15pp; Japanese.
XX AAV11909-V11925, AAV11927 and AAV11928 are oligonucleotide primers used
XX to identify sequences which modulate or inhibit expression, production or
XX reception of hepatocyte growth factor (HGF) or expression of c-Met. Such
XX oligonucleotides are useful as antitumour or anti-metastasis agents
XX Sequence 20 BP; 9 A; 0 C; 11 G; 0 T; 0 U; 0 Other;
SQ Query Match 19.5%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred.No.2.8e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Cy 924 CCTTTTATCCCTCCTCCTTC 942
Dd 19 CCTTTTCTCCTTCCCTTC 1

RESULT 55
AAV11923
ID AAV11923 standard; DNA; 20 BP.
AC AAV11923;
DT 13-AUG-1998 (first entry)
DB Hepatocyte growth factor inhibiting oligonucleotide #15.
KW Hepatocyte growth factor; HGF; c-Met; modulator; inhibitor;
KW antitumour agent; anti-metastasis agent; primer; ss.
CS Synthetic.
PN JP10127286-A.
PD 19-MAY-1998.
PF 01-NOV-1996; 96JP-00291499.
PR 01-NOV-1996; 96JP-00291499.
XX (TERU ) TERUMO CORP.
XX WPI; 1998-340665/30.
XX Oligo:nucleotide inhibiting HGF production - useful as antitumour and
XX anti-metastatic agent.
XX Claim 8; Page 10; 15pp; Japanese.
XX AAV11909-V11925, AAV11927 and AAV11928 are oligonucleotide primers used
XX to identify sequences which modulate or inhibit expression, production or
XX reception of hepatocyte growth factor (HGF) or expression of c-Met. Such
XX oligonucleotides are useful as antitumour or anti-metastasis agents
XX Sequence 20 BP; 0 A; 11 C; 0 G; 9 T; 0 U; 0 Other;
SQ Query Match 19.5%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred.No.2.8e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 924 CCTTTTATCCCTCCTCCTTC 942
||||| ||||| ||||| |||||
```

```
Db 2 CCTTTTCTCCTTCCCTTC 20

RESULT 56
AAD37207
ID AAD37207 standard; DNA; 20 BP.
XX AAD37207;
AC AAD37207;
XX 21-AUG-2002 (first entry)
XX Human MEKK4 antisense oligonucleotide, ISIS #123142.
XX Human; MEKK4 modulation; mitogen-activated protein kinase 4; MTKL1;
XX MAP3K4; MAP three kinase 1; MAP/ERK kinase 4; MAPKK4; cytostatic;
XX prophylaxis; immunological; hyperproliferative disorder; cancer; therapy;
XX antisense; inflammatory; phosphorothioate backbone; ss.
XX Homo sapiens.
OS Synthetic.
XX Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone"
FT modified_base 1..5
FT /*tag= b
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl nucleotides"
FT modified_base 10
FT /*tag= d
FT /mod_base= m5c
FT modified_base 11
FT /*tag= e
FT /mod_base= m5c
FT modified_base 13
FT /*tag= f
FT /mod_base= m5c
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT modified_base 18
FT /note= "2'-methoxyethyl nucleotides"
FT /*tag= g
FT /mod_base= m5c
FT modified_base 19
FT /*tag= h
FT /mod_base= m5c
XX WO200227033-A1.
XX 04-APR-2002.
XX 28-SEP-2001; 2001WO-US030549.
XX 29-SEP-2000; 2000US-00676436.
XX (ISIS-) ISIS PHARM INC.
XX Ward DT, Gaarde WA, Monia BP, Wyatt JR;
XX WPI; 2002-416486/44.
XX New antisense compound targeted to nucleic acid encoding mitogen-
XX activated protein kinase 4, useful for treating immunologic disorder,
XX inflammatory disorder or cancer.
XX Claim 3; Page 93; 132pp; English.
XX The present invention relates to antisense compounds, compositions and
XX methods for modulating the expression of MEKK4 (also referred as mitogen-
XX activated protein kinase 4; MAP3K4; MAP three kinase 1; MAP/ERK
```

kinase kinase 4; MAPKKK4; MTK1). The antisense oligos are useful for inhibiting the expression of MEKK4 in cells or tissues. They are also useful for treating an animal having a disease or condition associated with MEKK4 such as immunological, inflammatory, hyperproliferative disorder or cancer. Sequences of the invention are also useful for diagnostics, therapeutics, prophylaxis and as research reagents and kits. They are also useful in antisense therapy. The present sequence is an antisense oligonucleotide targeted to human MEKK4 DNA. This sequence is used in the exemplification of the invention

Sequence 20 BP; 2 A; 5 C; 2 G; 11 T; 0 U; 0 Other;

Query Match 19.5%; Score 14.2; DB 1; Length 20;

Best Local Similarity 84.2%; Pred. No. 2.8e+02;

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

907 ATTTCCTTGGCTTTGGC 925

1 ATTTCCTTGGCTTTGGC 19

RESULT 57

AS97999/C

AAS97999 standard; DNA; 21 BP.

AAS97999;

12-MAR-2002 (first entry)

Murine SAC1 gene-specific oligonucleotide PCR primer #552.

Human; mouse; SAC1; carbohydrate; sweetener; ethanol; alcoholism; ss; obesity; diabetes; transgenic embryo; body tissue; body fluid; pancreas; blood; tongue; PCR primer; anorectic; antidiabetic; gene therapy; protein replacement therapy.

Mus sp.

WO200183749-A2.

08-NOV-2001.

25-APR-2001; 2001WO-US013387.

28-APR-2000; 2000US-0200794P.

28-JUL-2000; 2000US-0221419P.

10-NOV-2000; 2000US-0247443P.

(WARN) WARNER LAMBERT CO.

(MONE-) MONELL CHEM SENSES CENT.

Bachmanov AA, Beauchamp GK, Chatterjee A, De Jong PJ, Li S, Li X;

Ohmen JD, Reed DR, Ross D, Tordoff MG;

WPI; 2002-075162/10.

Novel isolated polypeptide comprising variant form of mouse or human SAC1 polypeptide, and is associated with altered preference for carbohydrates or other sweeteners, useful for preventing obesity, diabetes, alcoholism.

Claim 14; Page 95; 239pp; English.

The invention relates to an isolated polypeptide, comprising a variant form of mouse or human SAC1 polypeptide. The variant form is associated with altered preference for carbohydrates, other sweeteners or ethanol. The polypeptide and its associated DNA sequence can be produced by recombinant techniques and is useful for preventing obesity, diabetes or alcoholism associated with SAC1 expression. The sequences are useful in screening for drugs and sweeteners. Recombinant cell lines and transgenic embryos may be used in screening for and identifying agents that induce or repress function of SAC1. Predisposition to diabetes, obesity or alcoholism can be ascertained by testing any fluid or tissue of a human (such as blood, pancreas or tongue) for sequence variations of the SAC1

gene. A sequence variation of the SAC1 locus may indicate a predisposition to diabetes, obesity and/or alcoholism and may provide a diagnostic mark. The polynucleotide can be detected in a biological sample by contacting the DNA with a probe to form a hybridisation complex which is then detected. The sequences represent cDNA encoding human and mouse SAC1 polypeptides and PCR primers specific for the SAC1 genes

Sequence 21 BP; 11 A; 0 C; 9 G; 1 T; 0 U; 0 Other;

Query Match 19.5%; Score 14.2; DB 1; Length 21;

Best Local Similarity 84.2%; Pred. No. 2.9e+02;

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

927 TTTATCCCTCCCTCTTCATT 945

19 TTTCCTCATCTCTTCCTT 1

RESULT 58

ABK89166

ABK89166 standard; DNA; 20 BP.

ABK89166;

21-OCT-2002 (first entry)

Human jAZF1 PCR primer 7SenseInner.

Human; jAZF1; juxtaposed with another zinc finger; jAZF1; jAZF1/jJAZF1; joined with jAZF1; proliferation; endometrial stroma tumour; immunogen; antigen; antibody; fertility; pregnancy; gene therapy; vaccine; PCR; primer; ss.

Homo sapiens.

WO200193805-A2.

13-DEC-2001.

04-JUN-2001; 2001WO-US017936.

02-JUN-2000; 2000US-0209093P.

(BGHM) BRIGHAM & WOMENS HOSPITAL INC.

Koontz J, Sklar J;

WPI; 2002-575047/61.

Novel jAZF1, jJAZ1 or jAZF1/jJAZ1 polypeptides useful as immunogens or antigens to raise or test anti-jAZF1, jJAZ1 or jAZF1/jJAZ1 antibodies.

Example 8; Page 58; 76pp; English.

The present invention relates to a new jAZF1 (juxtaposed with another zinc finger), jJAZ1 (joined with jAZF1) or jAZF1/jJAZ1 polypeptide. The methods of the invention can be used to identify a compound which controls proliferation of endometrial stroma, by expressing jJAZ1 in the presence of the compound, and determining whether the compound affects expression of jJAZ1. jAZF1, jJAZ1 or jAZF1/jJAZ1 polypeptides are useful as immunogens or antigens to raise or test anti-jAZF1, jJAZ1 or jAZF1/jJAZ1 antibodies. The invention can be used as bait proteins in a two hybrid assay or three hybrid assay to identify other proteins which bind or interact with jAZF1/jJAZ1-binding proteins. jAZF1, jJAZ1 or jAZF1/jJAZ1 molecules are useful for identifying the origin of tumour and as tumour marker protein to verify that a stromal tumour is from endometrium. The antibody is useful for promoting or decreasing fertility or pregnancy, and also for treating endometrial stromal tumours. The present nucleic acid sequence represents a PCR primer that was used in the methods of the invention for amplification of the human jAZF1 gene located on chromosome 7

Sequence 20 BP; 3 A; 10 C; 0 G; 7 T; 0 U; 0 Other;


```

1 WO9901559-A1.
2
3 14-JAN-1999.
4
5 03-JUL-1998; 98WO-JP003016.
6
7 03-JUL-1997; 97JP-00193207.
8
9 (ASAH ) ASahi KASEI KOGYO KK.
10
11 Nishida E, Moriguchi T, Matsuzaki O;
12 WPI; 1999-106059/09.
13
14 New mitogen activated protein kinase of vertebrate origin -
15 activates SAPK/JNK (but not p38) stimulation in response to Fas antigen
16 or TNF-alpha, used in, e.g. gene therapy.
17
18 Example 2; Page 35; 92pp; Japanese.
19
20 The invention relates to a novel mitogen-activated protein kinase (MAPK)
21 kinase, designated MKK7 of vertebrate origin and widely expressed in
22 tissues. The invention provides nucleic acid sequences encoding human and
23 mouse MKK7. MKK7 activates SAPK/JNK (stress activated protein kinase /c-
24 Jun N-terminal kinase) in response to stimulation by Fas antigen or TNF-
25 alpha but does not activate p38. Host cells transformed with expression
26 vectors comprising the MKK7 nucleic acids are used for the recombinant
27 production of the proteins. The products may be used for screening of
28 candidate inhibitors or promoters of the MAPK kinase cascade useful for
29 treatment of diseases (such as graft-versus-host disease, toxic epidermal
30 necrolysis, lupus and IGA kidney disease) in which abnormal activation or
31 deactivation of this cascade is involved. The products may also be useful
32 for production of diagnostic reagents for these diseases as well as gene
33 therapy
34
35 Sequence 20 BP; 1 A; 5 C; 4 G; 10 T; 0 U; 0 Other;
36
37 Query Match 18.6%; Score 13.6; DB 1; Length 20;
38 Best Local Similarity 80.0%; Pred. No. 3.5e+02;
39 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
40
41 / 913 TTGGCTCTTGGCTTTATC 932
42 ||||| |||||
43 1 TTGGCTCTCTCTGGATC 20
44
45 RESULT 62
46 X95277
47 AAX95277 standard; DNA; 20 BP.
48
49 AAX95277;
50
51 13-SEP-1999 (first entry)
52
53 PCR primer used to amplify an ORF of Chlamydia pneumoniae.
54
55 Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
56 sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;
57 neutralising epitope; PCR primer; ss.
58
59 Synthetic.
60 Chlamydia pneumoniae.
61
62 WO9927105-A2.
63
64 03-JUN-1999.
65
66 20-NOV-1998; 98WO-IB001890.
67
68 21-NOV-1997; 97FR-00014673.
69
70 04-NOV-1998; 98US-0107078P.

```

```

PA (GEST ) GENSET.
XX Griffais R;
XX WPI; 1999-357842/30.
XX
XX Genome sequence of Chlamydia pneumoniae.
XX
XX Page 1735; Disclosure; 1912pp; English.
XX
XX AAX91991-X97517 represent PCR primers used to amplify open reading frames
XX and other nucleic acid sequences from the genome of Chlamydia pneumoniae
XX (see AAX91990). C. pneumoniae causes respiratory disease such as
XX pneumonia and bronchitis and is thought to be a contributing factor in
XX heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema
XX nodosum or pharyngitis. The polypeptides encoded by the open reading
XX frames of the C. pneumoniae genome (see AAY34584 - AAY35879) can be used
XX in immunogenic compositions as vaccines. Vectors containing C. pneumoniae
XX nucleotide sequences can also be used as immunogenic compositions,
XX especially where the vector directs the expression of a neutralising
XX epitope of C. pneumoniae
XX
XX Sequence 20 BP; 2 A; 5 C; 5 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 18.6%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 3.5e+02;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 936 CCTCTTCATTGGTTTAATGT 955
XX ||||| ||||| |||||
XX Db 1 CCTCGTCTCTGGATTGATGT 20
XX
XX RESULT 63
XX AAS10302
XX ID AAS10302 standard; DNA; 20 BP.
XX
XX AC AAS10302;
XX
XX DT 24-OCT-2001 (first entry)
XX
XX DE Antisense oligonucleotide for human integrin alpha 4, ISIS 107254.
XX
XX KW Integrin alpha 4; antisense; very late antigen 4; VLA4;
XX autoimmune disease; inflammatory disease; rheumatoid arthritis;
XX multiple sclerosis; tumour metastasis; melanoma; asthma; psoriasis;
XX allergy; Grave's disease; Hashimoto's thyroiditis; oligonucleotide;
XX systemic lupus erythematosus; allograft rejection; ISIS 107254; ss.
XX
XX OS Homo sapiens.
XX OS Synthetic.
XX
XX FH Key Location/Qualifiers
XX modified_base 1..20
XX /tag= a
XX /mod_base= OTHER
XX /note= "Other= Phosphorothioate backbone"
XX
XX modified_base 1..20
XX /tag= b
XX /mod_base= OTHER
XX /note= "Other= All cytosines are 5-methyl cytosines"
XX
XX modified_base 1..3
XX /tag= c
XX /mod_base= OTHER
XX /note= "Other= 2' methoxyethoxy residues"
XX
XX modified_base 4..12
XX /tag= d
XX /mod_base= OTHER
XX /note= "Other= 2' deoxy residues"
XX
XX modified_base 13..20
XX /tag= e
XX /mod_base= OTHER
XX /note= "Other= 2' methoxyethoxy residues"
XX

```



```

XX  US6258790-B1.
PA
XX
XX  10-JUL-2001.
XX
XX  19-AUG-1999; 99US-00377309.
XX
XX  05-OCT-1998; 98US-00166203.
XX
XX  (ISIS-) ISIS PHARM INC.
PA
XX  Bennett CF, Condon TP, Cowsert LM;
XX  WPI; 2001-450381/48.
XX
XX  Composition for treating inflammatory and autoimmune diseases, comprises
XX  antisense compound targeted to nucleic acid molecule encoding integrin
XX  alpha4 and inhibit expression of integrin alpha4.
XX
XX  Claim 12; Col 49; 49pp; English.
XX
XX  The sequence is an antisense oligonucleotide targeting human integrin 4,
XX  a protein involved in autoimmune and inflammatory diseases. The invention
XX  relates to antisense inhibitors of integrin alpha 4 which target and
XX  inhibit expression of integrin alpha 4. The antisense molecules are
XX  useful for inhibiting the expression of integrin alpha4 in human cells or
XX  tissues, treating an animal having a disease or condition associated with
XX  expression of integrin alpha4, e.g., inflammatory disease or condition,
XX  autoimmune disease or condition including rheumatoid arthritis, multiple
XX  sclerosis and tumour metastases, melanoma, asthma, psoriasis, allergy,
XX  Grave's disease, Hashimoto's thyroiditis, systemic lupus erythematosus
XX  and allograft rejection, and diseases or conditions characterised by
XX  leukocyte migration into affected tissues, preferably central nervous
XX  system tissues. The antisense molecules are also useful for reducing the
XX  levels of VLA-4 and alpha4beta7 integrin in human cells or tissues, and
XX  reducing the adherence of cells of a first type e.g., melanoma cells or
XX  lymphocytes, to cells of a second type e.g., endothelial cells, by
XX  inhibiting integrin alpha4 expression and thus decreasing adhesion of
XX  cells
XX
XX  Query Match 18.6%; Score 13.6; DB 1; Length 20;
XX  Best Local Similarity 80.0%; Pred. No. 3.5e+02;
XX  Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY  945 TGGTTTAAATGATCGCTACC 964
Db  1 TGCCTTAGTGTTCTCTACC 20

RESULT 64
ABL43747/c
ID  ABL43747 standard; DNA; 20 BP.
XX
XX  ABL43747;
XX
XX  11-APR-2002 (first entry)
XX
XX  Human chromosome 1p36-35 PCR primer SEQ ID NO:791.
XX
XX  Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
XX  PCR primer; ss.
XX
XX  Homo sapiens.
XX
XX  JP2001321190-A.
XX
XX  20-NOV-2001.
XX
XX  12-MAR-2001; 2001JP-00068285.
XX
XX  10-MAR-2000; 2000JP-00066716.

```

```

XX  (RIKA ) RIKGAKU KENKYUSHO.
PA  (GENO-) GENOTEX YG.
XX
XX  WPI; 2002-144136/19.
XX
XX  Arraying genome clones.
XX
XX  Claim 4; Page 20; 528pp; Japanese.
XX
XX  The present invention describes a method of arraying genome clones. The
XX  method comprises: (a) clones of the genomic libraries contained in
XX  multiwell plates numbered for discrimination are mixed in each of the
XX  multiwell plates; (b) a primer designed based on the chromosome marker
XX  sequence is added to the mixture to carry out an amplification reaction;
XX  (c) a signal corresponding to the marker is detected from the resultant
XX  amplified product to specify the discrimination Nos. of the multiwell
XX  plates containing the clones having said marker sequence; (d) the order
XX  of the markers is changed so that the same discrimination Nos. succeed to
XX  the maximum in the specified discrimination Nos. to array the multiwell
XX  plates; (e) the clones in the multiwell plates of the specified
XX  discrimination Nos. are mixed respectively in each wells of longitudinal
XX  and lateral directions; (f) the mixed clones are cultured and the
XX  resultant cultures are amplified by using the above primer; (g) signals
XX  are detected from the amplified products; (h) the clones in the multiwell
XX  plates are specified from the detected result; and (i) the clones are
XX  reconstituted as the positions on the chromosome and arrayed. The
XX  microarray is useful for gene analysis. ABL42957 to ABL45322 represent
XX  PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634
XX  represent PCR primers for human chromosome 21q22.1, which are
XX  specifically claimed for use in the present invention
XX
XX  Query Match 18.6%; Score 13.6; DB 1; Length 20;
XX  Best Local Similarity 80.0%; Pred. No. 3.5e+02;
XX  Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY  921 TTGCCTTTTATCCCTCTCT 940
Db  20 TTGCCCTTTTCCCTTTCT 1

RESULT 65
ABT05172/c
ID  ABT05172 standard; DNA; 20 BP.
XX
XX  ABT05172;
XX
XX  11-OCT-2002 (first entry)
XX
XX  TNFR1 expression modulation related antisense oligo SEQ ID No 202.
XX
XX  Antisense compound; tumour necrosis factor receptor 1; liver disease;
XX  TNFR1; hepatitis; liver injury; hyperproliferative disorder; cancer;
XX  mouse; murine; ds.
XX
XX  Mus sp.
XX
XX  WO200248168-A1.
XX
XX  20-JUN-2002.
XX
XX  22-OCT-2001; 2001WO-US051224.
XX
XX  24-OCT-2000; 2000US-00695451.
XX
XX  (ISIS-) ISIS PHARM INC.
XX
XX  Baker BF, Cowsert LM, Zhang H, Dean NM;
XX  WPI; 2002-583481/62.
XX

```

Novel antisense compound targeted to nucleic acid molecule encoding tumor necrosis factor receptor 1 (TNFR1), useful for treating humans having disease associated with TNFR1 e.g. hepatitis, liver injury, liver cancer.

Example 21; Page 61; 121pp; English.

The invention relates to an antisense compound 8 to 30 nucleotides in length targeted to nucleic acid molecule encoding tumour necrosis factor receptor 1 (TNFR1), where the antisense compound inhibits expression of TNFR1. The antisense compound is useful for inhibiting the expression of TNFR1 in cells or tissues. The antisense compound is also useful for treating an animal (preferably human) having a disease or condition associated with TNFR1, e.g. a liver disease (such as hepatitis, or liver injury) or a hyperproliferative disorder such as cancer, by inhibiting the expression of TNFR1. The antisense compound is useful for diagnostics, therapeutics, prophylaxis and as research reagents and kits. This polynucleotide sequence represents a mouse oligonucleotide relating to the TNFR1 of the invention

Sequence 20 BP; 8 A; 4 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 18.6%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 3.5e+02;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

940 TTCATGTTGTTTAACTATCG 959
||||| ||||| ||||| |||||
20 TTCATCAGTTTAAATGTGCG 1

RESULT 66

ABZ99185
ABZ99185 standard; DNA; 20 BP.

ABZ99185;

17-OCT-2003 (first entry)

Human PDE4C oligonucleotide sequence.

Human; antisense; lung dysfunction; nasal airway dysfunction;
antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
antiallergic; hypotensive; immunosuppressive; cytostatic; gene therapy;
antisense gene therapy; respiratory; lung; adenosine sensitivity;
adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
lung inflammation; respiratory disease; ds.

Homo sapiens.

WO200285308-A2.

31-OCT-2002.

23-APR-2002; 2002WO-US013135.

24-APR-2001; 2001US-0286137P.

(EPIG-) EPIGENESIS PHARM INC.

Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
Miller S, Tang L, Shahabuddin S;

WPI; 2003-229219/22.

Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or ubiquinone.

Disclosure; SEQ ID NO 14427; 872pp; English.

The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the

initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ublquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of ubiquinone or lung surfactant in a subject's tissue, or treating bronchoconstriction, lung inflammation, lung allergies, or a respiratory disease or condition. Note: the sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 20 BP; 0 A; 11 C; 0 G; 9 T; 0 U; 0 Other;

Query Match 18.6%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 3.5e+02;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

925 CTTTATCCCTCCTCTTCAT 944
||||| ||||| ||||| |||||
1 CTCCTCCCTCCTCTCTTCTT 20

RESULT 67

AAD48785/c
AAD48785 standard; DNA; 20 BP.

AAD48785;

07-MAR-2003 (first entry)

yacM gene specific PCR primer 1.

S-yacM protein; S-yqeJ protein; pharmaceutical formulation;
bacterial infection; antibacterial; PCR; primer; ss.

Unidentified.

WO200281652-A2.

17-OCT-2002.

21-FEB-2002; 2002WO-US005086.

23-FEB-2001; 2001US-00792251.

(MILL-) MILLENNIUM PHARM INC.

Fritz C, Youngman P, Guzman L;

WPI; 2003-058529/05.

Method for determining whether a test compound is a candidate antibacterial compound by its effect on the polypeptides encoded by the genes yacM and S-yqeJ.

Disclosure; Page 15; 49pp; English.

The invention relates to a method for determining whether a test compound is a candidate antibacterial compound. The method comprising: contacting an S-yacM or an S-yqeJ polypeptide with the test compound; and detecting interaction of the test compound with the S-yacM or S-yqeJ polypeptide, where an interaction indicates that the test compound is a candidate antibacterial compound. A method is claimed for treating a bacterial infection in an organism by administering a therapeutically effective amount of a pharmaceutical formulation and where the bacterial infection

CC is a Streptococcus infection. An antibacterial agent can also be
CC administered to treat a bacterial infection in an organism. The present
CC sequence is yacW gene specific PCR primer

SQ Sequence 20 BP; 11 A; 2 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 18.6%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 3.5e+02;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 905 TCATTTTCCTTGCTTTCG 924

||||| ||| |||||
Do 20 TCATTTTCGCTTTCG 1

RESULT 68

ABA77714

ID ABA77714 standard; DNA; 17 BP.

XX

AC ABA77714;

XX

DT 24-JAN-2002 (first entry)

XX

DE Retinoblastoma mutation correcting oligonucleotide SEQ ID NO: 560.

XX

KW Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
KW haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;
KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;
KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
KW Alzheimer's disease; cytostatic; antislacking; antianaemic; haemostatic;
KW antileptic; ss.

XX

OS Homo sapiens.

XX

FN WO200173002-A2.

XX

PD 04-OCT-2001.

XX

PF 27-MAR-2001; 2001WO-US009761.

XX

PR 27-MAR-2000; 2000US-0192176P.

XX

PR 27-MAR-2000; 2000US-0192179P.

XX

PR 01-JUN-2000; 2000US-0208538P.

XX

PR 30-OCT-2000; 2000US-0244989P.

XX

XX (UYDE) UNIV DELAWARE.

XX

PI Kmiec EB, Gamper HB, Rice MC;

XX

XX WPI; 2001-639230/73.

XX

XX Claim 7; Page 77; 294pp; English.

XX

CC The present invention provides single-stranded oligonucleotides which can
CC be used for the targeted alteration of genomic sequences, where the
CC oligonucleotide has at least one mismatch compared with the genomic
CC sequence to be altered. In particular, these sequences are directed at
CC the following genes: adenosine deaminase, p53, beta-globin,
CC retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
CC (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus
CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
CC (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
CC presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
CC such as cancer, adenosine deaminase deficiency, cystic fibrosis,

CC haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
CC various syndromes. The present sequence is one of the gene correcting
CC oligonucleotides of the invention

SQ Sequence 17 BP; 5 A; 4 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 18.4%; Score 13.4; DB 1; Length 17;

Best Local Similarity 93.3%; Pred. No. 3.4e+02;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 953 TGTATCGCTACCAAC 967

||||| ||| |||||
Db 3 TGTATCGCTACCAAC 17

RESULT 69

ABA77713/C

ID ABA77713 standard; DNA; 17 BP.

XX

AC ABA77713;

XX

DT 24-JAN-2002 (first entry)

XX

DE Retinoblastoma mutation correcting oligonucleotide SEQ ID NO: 559.

XX

KW Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
KW retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
KW cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
KW adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
KW haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;
KW mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
KW familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;
KW UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
KW Alzheimer's disease; cytostatic; antislacking; antianaemic; haemostatic;
KW antileptic; ss.

XX

OS Homo sapiens.

XX

FN WO200173002-A2.

XX

PD 04-OCT-2001.

XX

PF 27-MAR-2001; 2001WO-US009761.

XX

PR 27-MAR-2000; 2000US-0192176P.

XX

PR 27-MAR-2000; 2000US-0192179P.

XX

PR 01-JUN-2000; 2000US-0208538P.

XX

PR 30-OCT-2000; 2000US-0244989P.

XX

XX (UYDE) UNIV DELAWARE.

XX

XX Kmiec EB, Gamper HB, Rice MC;

XX

XX WPI; 2001-639230/73.

XX

XX Claim 7; Page 77; 294pp; English.

XX

CC The present invention provides single-stranded oligonucleotides which can
CC be used for the targeted alteration of genomic sequences, where the
CC oligonucleotide has at least one mismatch compared with the genomic
CC sequence to be altered. In particular, these sequences are directed at
CC the following genes: adenosine deaminase, p53, beta-globin,
CC retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
CC (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus
CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
CC (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
CC presenilin-2 (PSEN2). These can be used in the gene therapy of diseases

```

: such as cancer, adenosine deaminase deficiency, cystic fibrosis,
: haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
: Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
: various syndromes. The present sequence is one of the gene correcting
: oligonucleotides of the invention
:
: Sequence 17 BP; 6 A; 2 C; 4 G; 5 T; 0 U; 0 Other;
:
: Query Match      18.4%; Score 13.4; DB 1; Length 17;
: Best Local Similarity 93.3%; Pred. No. 3.4e+02;
: Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
:
: 953 TGTATGCTGCTACCAAC 967
: |||||
: 15 TGTATGCTGCTACCAAC 1
:
: RESULT 70
: ID53467
: ID ACDS3467 standard; RNA; 17 BP.
: ACDS3467;
:
: 24-SEP-2003 (first entry)
:
: HBV G-cleaver substrate sequence #155.
:
: Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
: RNA stability; RNA expression; RNA synthesis; antisense;
: enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;
: amberyne; G-cleaver ribozyme; decoy molecule; aptamer;
: HBV reverse transcriptase; Enhancer I region; viral replication;
: degenerative; disease state; HBV infection; HCV infection; cirrhosis;
: liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
: virucide; antiinflammatory; substrate; ss.
:
: Hepatitis B virus.
:
: WO200281494-A1.
:
: 17-OCT-2002.
:
: 26-MAR-2002; 2002WO-US009187.
:
: 26-MAR-2001; 2001US-00817879.
: 08-JUN-2001; 2001US-00877478.
: 08-JUN-2001; 2001US-0296876P.
: 24-OCT-2001; 2001US-0335059P.
: 05-DEC-2001; 2001US-0337055P.
:
: (RIBO-) RIBOZYME PHARM INC.
: (BLAT/) BLATT L.
: (MACE/) MACEJAK D.
: (MCSW/) MCSWIGGEN J.
: (MORR/) MORRISSEY D.
: (PAVC/) PAVCO P.
: (LEEP/) LEE P.
: (DRAP/) DRAPER K.
: (ROBE/) ROBERTS E.
:
: Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
: Draper K, Roberts E;
:
: WPI; 2003-229207/22.
:
: Novel compound useful for treating cirrhosis, liver failure,
: hepatocellular carcinoma, or condition associated with hepatitis C virus
: infection.
:
: Example 1; Page 168; 387pp; English.
:
: The present invention relates to nucleic acid molecules which modulate
: the synthesis, expression and/or stability of Hepatitis C virus (HCV) or

```

```

CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
CC inozymes, zinzymes, amberyne, and G-cleaver ribozymes. Also disclosed
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC as oligonucleotides that specifically bind the Enhancer I region of HBV
CC DNA. The nucleic acids may be used to modulate the expression of HBV
CC genes and HBV viral replication. Also disclosed is a method for screening
CC compounds and/or potential therapies directed against HBV, and compounds
CC that modulate the expression and/or replication of HCV. The compounds
CC methods of the invention are useful for the treatment of degenerative and
CC disease states related to HBV and HCV infection, replication and gene
CC expression such as cirrhosis, liver failure, and hepatocellular
CC carcinoma. The present sequence represents a substrate for one of the HBV
CC ribozyme, inozyme, G-cleaver, zinzyme, DNazyme or amberyne sequences
CC disclosed in the present invention
XX
SQ Sequence 17 BP; 0 A; 2 C; 4 G; 0 T; 11 U; 0 Other;
:
: Query Match      18.4%; Score 13.4; DB 1; Length 17;
: Best Local Similarity 26.7%; Pred. No. 3.4e+02;
: Matches 4; Conservative 10; Mismatches 1; Indels 0; Gaps 0;
:
: QY 909 TTCTTTGGTCTTTG 923
: :|:|:|:|:|:|:|:|:|
: Db 1 UUUUUUUUGUCUUUG 15
:
: RESULT 71
: ACDS2078
: ID ACDS2078 standard; RNA; 17 BP.
: XX
: AC ACDS2078;
: XX
: DT 24-SEP-2003 (first entry)
: XX
: DE HBV inozyme substrate sequence #208.
: XX
: KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
: KW RNA stability; RNA expression; RNA synthesis; antisense;
: KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;
: KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;
: KW HBV reverse transcriptase; Enhancer I region; viral replication;
: KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
: KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
: KW virucide; antiinflammatory; substrate; ss.
: OS Hepatitis B virus.
: XX
: PN WO200281494-A1.
: XX
: PD 17-OCT-2002.
: XX
: PF 26-MAR-2002; 2002WO-US009187.
: XX
: PR 26-MAR-2001; 2001US-00817879.
: PR 08-JUN-2001; 2001US-00877478.
: PR 08-JUN-2001; 2001US-0296876P.
: PR 24-OCT-2001; 2001US-0335059P.
: PR 05-DEC-2001; 2001US-0337055P.
: XX
: (RIBO-) RIBOZYME PHARM INC.
: PA (BLAT/) BLATT L.
: PA (MACE/) MACEJAK D.
: PA (MCSW/) MCSWIGGEN J.
: PA (MORR/) MORRISSEY D.
: PA (PAVC/) PAVCO P.
: PA (LEEP/) LEE P.
: PA (DRAP/) DRAPER K.
: PA (ROBE/) ROBERTS E.
: XX
: Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
: Draper K, Roberts E;

```


for treating a disease. This disease includes arachidonic acid metabolism, cancer or cardiovascular diseases. This sequence represents a primer used to isolate regions of the human cytochrome P450 polypeptide 2C8 gene (CYP2C8) in order to identify the single nucleotide polymorphism (SNP) in that region of different individuals useful in disease diagnosis

Sequence 19 BP; 3 A; 6 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 18.4%; Score 13.4; DB 1; Length 19;
Best Local Similarity 93.3%; Pred. No. 3.7e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

899 CCTGGTCATTTCCT 913
|||||||
4 CCTGGTCATTTCCT 18

RESULT 74
AAD39631
AAD39631 standard; DNA; 20 BP.

AAD39631;

04-OCT-2002 (first entry)

Human SR-cyp antisense oligonucleotide, ISIS #123895.

Human; antisense; SR-cyp; Clk-associated RS cyclophilin; inflammation; hyperproliferative disorder; cancer; prophylaxis; infection; therapy; tumour; CARs-cyp; phosphorothioate backbone; ss.

Homo sapiens.
Synthetic.

Key	Location/Qualifiers
modified_base	1..20
	/tag= a
	/mod_base= OTHER
	/note= "Phosphorothioate backbone"
modified_base	1..5
	/tag= b
	/mod_base= OTHER
	/note= "2'-methoxyethyl nucleotides"
modified_base	2
	/tag= d
	/mod_base= m5c
modified_base	8
	/tag= e
	/mod_base= m5c
modified_base	14
	/tag= f
	/mod_base= m5c
modified_base	16..20
	/tag= c
	/mod_base= OTHER
	/note= "2'-methoxyethyl nucleotides"
modified_base	19..20
	/tag= g
	/mod_base= m5c

WO200236809-A2.

10-MAY-2002.

30-OCT-2001; 2001WO-US047335.

03-NOV-2000; 2000US-00706197.

{ISIS-} ISIS PHARM INC.
{COLD-} COLD SPRING HARBOR LAB.

Bennett CF, Spector DL, Wyatt JR;

WPI; 2002-479763/51.

Novel antisense compounds targeted to nucleic acids encoding SR-cyp, Clk-associated RS cyclophilin for modulating the gene expression and treating hyperproliferative disorders such as cancer.

Claim 3; Page 90; 117pp; English.

The invention relates to antisense compounds targetted to a nucleic acid molecule encoding human SR-cyp (Clk-associated RS cyclophilin) to inhibit its expression. SR-cyp is also referred to as CARs-cyp. Antisense compounds of the invention are used for treating diseases or conditions associated with SR-cyp. The diseases treated include hyperproliferative disorders e.g. cancer or hyperproliferative disorders resulting from an alternative splicing event. They are useful for diagnostics, therapeutics and as research reagents, e.g. prophylactically to prevent or delay infection, inflammation or tumour formation. They are also used in antisense therapy. The present sequence is an antisense oligonucleotide targetted to human SR-cyp

Sequence 20 BP; 4 A; 5 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 18.4%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 3.8e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

900 CCTGGTCATTTCCTT 914

|||||||

2 CATGGTCATTTCCTT 16

RESULT 75

AAD40931

AAD40931 standard; DNA; 20 BP.

AAD40931;

30-OCT-2002 (first entry)

Human HDAL antisense oligonucleotide ISIS #123712.

Human; histone deacetylase 1; HDAL; enzyme; hyperproliferative condition; viral infection; prophylactic; inflammation; phosphorothioate backbone; tumour; antisense; cytostatic; virucide; ss.

Homo sapiens.
Synthetic.

Key	Location/Qualifiers
modified_base	1..20
	/tag= a
	/mod_base= OTHER
	/note= "Phosphorothioate backbone"
modified_base	1..5
	/tag= b
	/mod_base= OTHER
	/note= "2'-methoxyethyl residues"
modified_base	1..4
	/tag= d
	/mod_base= m5c
modified_base	6
	/tag= e
	/mod_base= m5c
modified_base	8
	/tag= f
	/mod_base= m5c
modified_base	9..10
	/tag= g
	/mod_base= m5c
modified_base	12..13
	/tag= h
	/mod_base= m5c
modified_base	15

GT /*tag= i
 FT /mod_base= m5c
 FT 16..20
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'-methoxyethyl residues"
 FT 18
 FT /*tag= j
 FT /mod_base= m5c

XX WO200250244-A2.
 XX PN
 XX XX
 XX 27-JUN-2002.
 XX XX
 XX 07-DEC-2001; 2001WO-US046518.
 XX XX
 XX 19-DEC-2000; 2000US-00745167.
 XX XX
 XX (ISIS-) ISIS PHARM INC.
 XX PA
 XX XX
 XX PI Monia BP, Wyatt JR;
 XX XX
 XX DR WPI; 2002-519880/55.
 XX XX
 XX PT Antisense compounds targeted against polynucleotides encoding Histone
 PT deacetylase 1 useful for treating hyperproliferative conditions, e.g.
 PT cancer of hematopoietic, lymphoid, myeloid or breast, or a viral
 PT infection.
 XX XX
 XX Claim 3; Page 94; 120pp; English.

XX The present invention relates to antisense compounds, compositions and
 CC methods for modulating the expression of Histone deacetylase 1 (HDAl).
 CC Sequences of the invention are useful for inhibiting the expression of
 CC HDAl in cells or tissues and for treating an animal having a disease or
 CC condition associated with HDAl e.g., hyperproliferative condition, which
 CC is cancer of haematopoietic, lymphoid, myeloid or breast or a condition
 CC resulting from a viral infection. Antisense compounds either alone or in
 CC combination with other antisense compounds or therapeutics can be used as
 CC tools in differential and/or combinatorial analyses to elucidate the
 CC expression patterns of a portion or the entire complement of genes
 CC expressed within cells and tissues. They are commonly used as research
 CC reagents and diagnostics. They may also be useful prophylactically such
 CC as to prevent or delay infection, inflammation or tumour formation. The
 CC present DNA sequence is an antisense oligonucleotide targetted to human
 CC HDAl DNA

XX SQ Sequence 20 BP; 1 A; 12 C; 1 G; 6 T; 0 U; 0 Other;
 Query Match 18.4%; Score 13.4; DB 1; Length 20;
 Best Local Similarity 93.3%; Pred. No. 3.8e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 929 TATCCCTCCTCTTCA 943
 DB 5 TCTCCCTCCTCTTCA 19

RESULT 76
 AAX61163
 ID AAX61163 standard; DNA; 18 BP.
 XX
 XX AAX61163;
 XX
 XX 28-JUL-1999 (first entry)
 XX Human chromosome alpha-satellite region.
 XX
 KW Probe; human; chromosome 17 triple-helix forming oligonucleotide;
 KW genetic disorder; missing chromosome; aneuploidy; chromosome 21;
 KW infectious disease; diagnosis; alpha-satellite region; ss.
 XX
 CS Homo sapiens.

XX WO9924622-A1.
 XX PN
 XX 20-MAY-1999.
 XX XX
 XX 10-NOV-1998; 98WO-US023765.
 XX PF
 XX 10-NOV-1997; 97US-0064997P.
 XX PR
 XX (UYPR-) UNIV PRINCETON.
 XX PA
 XX Johnson MD, Fresco JR;
 XX PI
 XX WPI; 1999-327425/27.
 XX DR
 XX Novel use of triple helix forming oligonucleotides, useful for in situ
 XX PT detection of double stranded target sequence.
 XX PT
 XX Claim 19; Page 12; 45pp; English.
 XX PS
 XX CC This sequence represents a human chromosome alpha-satellite region. The
 CC invention relates to the use of a triple-helix forming oligonucleotide
 CC for in situ detection of a double-stranded target nucleic acid sequence.
 CC The method can be used to detect a genetic disorder e.g. to detect an
 CC extra or missing chromosome or fragment or aneuploidy, especially for
 CC detecting an extra or missing chromosome 17 or 21. The method can be also
 CC be used to screen for individuals at risk of developing a disease or for
 CC diagnosing an infectious disease. The use of triple helix forming
 CC oligonucleotides allows in situ detection of double stranded target
 CC sequence as opposed to prior art uses of developing potential anti-gene
 CC therapeutic agents or artificial restriction endonucleases
 XX CC
 XX SQ Sequence 18 BP; 1 A; 6 C; 0 G; 11 T; 0 U; 0 Other;
 Query Match 18.1%; Score 13.2; DB 1; Length 18;
 Best Local Similarity 83.3%; Pred. No. 3.8e+02;
 Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 927 TTTATCCCTCCTCTTCAT 944
 DB 1 TTTCTCCTCTTCTTCAT 18
 RESULT 77
 AAX12832
 ID AAX12832 standard; DNA; 19 BP.
 XX
 XX AAX12832;
 XX
 XX 25-MAR-2003 (revised)
 XX DT 09-OCT-1991 (first entry)
 XX
 XX Probe to human leukocyte antigen DNA.
 XX DE
 XX HLA; polymerase chain reaction; PCR; paternity testing;
 XX KW transplant compatibility; anthropology; HLA-DQalpha locus; ss.
 XX
 XX Synthetic.
 XX OS
 XX Key Location/Qualifiers
 XX FT modified_base 1
 XX FT /*tag= a
 XX FT /mod_base= aminotetraethylene glycol linker
 XX
 XX EP439208-A.
 XX PN
 XX 31-JUL-1991.
 XX PD
 XX 11-JAN-1991; 91EP-00200038.
 XX PF
 XX 22-JAN-1990; 90US-00468456.
 XX PR
 XX (EAST) EASTMAN KODAK CO.
 XX PA

```

(CETU ) CETUS CORP.
(WUAL/) WU A. L.
(CLIN-) CLINICAL DIAGNOSTIC SYSTEMS INC.
(JOHN) JOHNSON & JOHNSON CLINICAL DIAGNOSTICS INC.

Wu A, Chang C, Erlich HA;
WPI; 1991-224623/31.

Method for detecting HLA DNA - by amplifying the DNA using polymerase
chain reaction contacting with probe and detecting by peroxidase-avidin
conjugate.

Claim 9; Page 13; 13pp; English.

The probe is complementary to a biotinylated primer extension product
from the HLA-DQalpha locus. It is attached to a polymeric particle via an
ethylene glycol unit linker, to form an insoluble hybrid of probe and
primer extension product. The probe is highly efficient at hybridising
with the amplified PCR products and provides a rapid and simple means of
detecting HLA DNA. (Updated on 25-MAR-2003 to correct PA field.)

Sequence 19 BP; 0 A; 5 C; 5 G; 9 T; 0 U; 0 Other;

Query Match      18.1%; Score 13.2; DB 1; Length 19;
Best Local Similarity 83.3%; Pred. No. 4e+02;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

915 TGGTCTTGGCTTTTATC 932
|||||
2 TGGTGTTCCTGCTTC 19

--SULT 78
AAV02643/C
AAV02643 standard; DNA; 19 BP.

AAV02643;
25-MAR-2003 (revised)
08-APR-1998 (first entry)

S. epidermidis 16S-23S rRNA intergenic spacer region PCR primer 1.
Intergenic spacer region; 16S rRNA; 23S rRNA; bovine mastitis; diagnosis;
inflammation; infection; PCR primer; ss.

Synthetic.
Staphylococcus epidermidis.
WO9732038-A2.
04-SEP-1997.
26-FEB-1997; 97WO-FI000126.
27-FEB-1996; 96US-00607384.
(OULU-) OULUTECH LTD.
Alatossava J, Tilsala-Timisjaervi AK, Forsman PT;
WPI; 1997-448698/41.

Detecting mastitis by identifying in milk DNA indicating inflammation and
bacterial infection - also DNA indicative of antibiotic resistance,
provides rapid diagnosis, identifies causative agent and suggests
suitable treatment.

Claim 14; Page 21; 56pp; English.

PCR primers AAV02643 and AAV02644 are used to amplify the 16S-23S rRNA
intergenic spacer region from Staphylococcus epidermidis ATCC 12228, a
pathogenic bacteria which is a common cause of bovine mastitis. This
spacer region is used in a novel assay to diagnose mastitis in milk by
detecting DNA specific for somatic cells which is indicative of
inflammation or by detecting DNA specific for a mastitis pathogen which
is indicative of infection. This method is particularly useful for the
detection of mastitis caused by Streptococcus or Staphylococcus species.
The method is rapid, does not involve isolation of cells or bacteria and
may allow the causative agent to be identified. (Updated on 25-MAR-2003
to correct PI field.)

Sequence 19 BP; 7 A; 2 C; 6 G; 4 T; 0 U; 0 Other;

Query Match      18.1%; Score 13.2; DB 1; Length 19;
Best Local Similarity 83.3%; Pred. No. 4e+02;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 929 TATCCCTCTCTCTTCTTGTG 946
|||||
19 TATCCCTCTCTCTTCTG 2

--RESULT 79
AAD35894/C
ID AAD35894 standard; DNA; 19 BP.
XX
AC AAD35894;
XX
DT 26-JUL-2002 (first entry)
XX
DE HIV gag CA and NC domain amplifying PCR primer, MSHIV3.
XX
KW Retroviral capsid assembly inhibitor; chimeric; Gag protein; HIV-1;
KW Betaretrovirus domain; infection; human immunodeficiency virus; PCR;
KW HIV-2; primer; CA domain; NC domain; ss.
XX
OS Human immunodeficiency virus.
XX
PN WO200226783-A2.
XX
PD 04-APR-2002.
XX
PF 28-SEP-2001; 2001WO-US030498.
XX
PR 28-SEP-2000; 2000US-0236273P.
XX
PA (UABR-) UAB RES FOUND.
XX
PI Sakalian M, Hunter E;
XX
DR WPI; 2002-372116/40.
XX
PT Screening for retroviral capsid assembly inhibitors, using chimeric
PT Betaretrovirus domain Gag polypeptides, which induce the assembly of Gag
PT polypeptides into viral capsids, useful for treating HIV.
XX
PS Example 2; Page 31; 90pp; English.
XX
CC The invention relates to a method for screening retroviral capsid
CC assembly inhibitors. The method involves contacting a chimeric Gag
CC polypeptide comprising a portion of Betaretrovirus domain and another
CC retroviral Gag polypeptide (the Betaretrovirus domain induces the
CC spontaneous assembly of the chimeric Gag polypeptide into viral capsids)
CC with a candidate inhibitor. The method is used to screen candidate agents
CC that may be used to treat retroviral infections especially those caused
CC by human immunodeficiency virus (HIV)-1 and HIV-2. The present sequence
CC is HIV gag CA and NC domain amplifying PCR primer used to generate
CC chimeric constructs of the invention
XX
SQ Sequence 19 BP; 10 A; 3 C; 5 G; 1 T; 0 U; 0 Other;

Query Match      18.1%; Score 13.2; DB 1; Length 19;
Best Local Similarity 83.3%; Pred. No. 4e+02;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```


QY 912 CTTTGGCTTTGCTTTT 929
 DB 18 CTTTGGCTTTGCTTTAT 1

RESULT 80
 AAV49792/C
 ID AAV49792 standard; DNA; 20 BP.
 AC AAV49792;
 XX
 XX
 XX 02-NOV-1998 (first entry)
 XX
 XX Mouse haematopoietic marker PCR primer PECAM-1 (3').
 XX Mesoderm cell; haematopoiesis; vascular growth; embryo development;
 KW treatment; erythroid cell; blood; infection; myocardial ischaemia;
 KW hypervascularisation; hedgehog compound; modulator; gene therapy;
 KW PCR primer; ss.
 XX
 XX Synthetic.
 OS Mus sp.
 XX
 XX WO9835020-A2.
 XX
 XX 13-AUG-1998.
 XX
 XX 10-FEB-1998; 98WO-US002633.
 XX
 XX 10-FEB-1997; 97US-0037513P.
 PR 16-JUN-1997; 97US-0049763P.
 XX
 XX (HARD) HARVARD COLLEGE.
 XX
 XX Baron MH, Farrington SM, Belaussoff M;
 XX WPI; 1998-447218/38.
 XX
 XX Stimulating differentiation of mesodermal cells to haematopoietic or
 PT vascular cells - by exposure to an equivalent, specifically hedgehog
 PT protein, of product of extra-embryonic tissue, for treating developmental
 PT abnormalities in utero, e.g. ischaemia, excessive vascular growth.
 XX
 XX Example 2; Page 38; 76pp; English.

AAV49781-V49806 are PCR primers used in a method of stimulating a
 CC population of undifferentiated mesodermally derived cells to undergo
 CC haematopoiesis and/or vascular growth by providing them with a compound
 CC that is functionally equivalent to a gene product expressed in extra-
 CC embryonic tissue. This method has applications in the treatment of
 CC developmental errors (in vascular growth or haematopoiesis), in an embryo
 CC in utero. The method can also be used in the treatment of conditions
 CC involving an abnormal number of erythroid cells e.g. anaemia,
 CC inflammation, cancer, organ failure, thrombocytopaenia, polycythaemia
 CC vera, erythroleukaemia and also other blood abnormalities such as the
 CC effects of radiation treatment, infection with human immune deficiency
 CC virus. This compound can also be used in the treatment of myocardial
 CC ischaemia, and hypervascularisation of genetic or degenerative origin
 CC (e.g. ocular neovascularisation of diabetes, breast cancer etc.), to
 CC promote revascularisation for healing wounds such as duodenal ulcers, in
 CC the treatment of excessive vascular growth by treating with a hedgehog
 CC compound that inhibits activity of the compound and in vitro or in vivo.
 CC assays for determining activity of compounds that modulate haematopoiesis
 CC and vascular growth e.g. for screening libraries, to test growth factors,
 CC cytokines etc., to examine haematopoietic potential of other embryonic
 CC tissues, to monitor development of primary embryonic cells and vascular
 CC structures, to determine effects of targeted mutations and to study
 CC effects of gene therapy

Sequence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other;
 Query Match 18.1%; Score 13.2; DB 1; Length 20;

Best Local Similarity 83.3%; Pred. No. 4.1e+02;
 Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 949 TTAATGATCGCTACCAA 966
 DB 20 TTAGTGTTCGCTGCCAA 3

RESULT 81
 AAX93390/C
 ID AAX93390 standard; DNA; 20 BP.
 XX
 XX AAX93390;
 XX
 XX 13-SEP-1999 (first entry)
 XX
 XX PCR primer used to amplify an ORF of Chlamydia pneumoniae.
 XX Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
 KW sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;
 KW neutralising epitope; PCR primer; ss.
 XX
 XX Synthetic.
 OS Chlamydothila pneumoniae.
 XX
 XX WO9927105-A2.
 XX
 XX 03-JUN-1999.
 XX
 XX 20-NOV-1998; 98WO-IB001890.
 XX
 XX 21-NOV-1997; 97ER-00014673.
 PR 04-NOV-1998; 98US-0107078P.
 XX
 XX (GEST) GENSET.
 XX
 XX Griffais R;
 XX
 XX WPI; 1999-357842/30.
 XX
 XX Genome sequence of Chlamydia pneumoniae.
 XX
 XX Page 1588; Disclosure; 1912pp; English.

AAX91991-X97517 represent PCR primers used to amplify open reading frames
 CC and other nucleic acid sequences from the genome of Chlamydia pneumoniae
 CC (see AAX91990). C. pneumoniae causes respiratory disease such as
 CC pneumonia and bronchitis and is thought to be a contributing factor in
 CC heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema
 CC nodosum or pharyngitis. The polypeptides encoded by the open reading
 CC frames of the C. pneumoniae genome (see AAX34584-AAX35879) can be used
 CC in immunogenic compositions as vaccines. Vectors containing C. pneumoniae
 CC nucleotide sequences can also be used as immunogenic compositions,
 CC especially where the vector directs the expression of a neutralising
 CC epitope of C. pneumoniae

Sequence 20 BP; 8 A; 3 C; 7 G; 2 T; 0 U; 0 Other;
 Query Match 18.1%; Score 13.2; DB 1; Length 20;
 Best Local Similarity 83.3%; Pred. No. 4.1e+02;
 Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 917 GTCCTTGCCTTTATCCC 934
 DB 18 GTCCTTGCCTTTATCCC 1

RESULT 82
 AAS16412/C
 ID AAS16412 standard; DNA; 20 BP.
 XX
 XX AAS16412;
 XX

05-JUN-2002 (first entry)
 Haematopoietic marker PECAM-1, 3' PCR primer.
 Haematopoiesis; PECAM-1; mesodermal precursor cell; vasotropic;
 sonic hedgehog; desert hedgehog; indian hedgehog; moonrat hedgehog;
 tiggly winkle hedgehog; haemostatic; cytostatic; anaemia; leukopenia;
 chronic inflammatory disease; cancer; organ failure; thrombocytopenia;
 ischaemia; tumour; diabetes; aging; hypervascularisation; trauma;
 infection; neovascularisation; AIDS; acquired immunodeficiency virus;
 leukaemia; arthritis; polycythaemia vera; erythroleukaemia;
 transgenic mouse; PCR primer; ss.
 Mus sp.
 US2001041668-A1.
 15-NOV-2001.
 10-FEB-1998; 98US-00021660.
 10-FEB-1998; 98US-00021660.
 (HARD) HARVARD COLLEGE.
 Baron MH, Farrington SM, Belaussoff M;
 WPI; 2002-017219/02.
 Stimulating differentiation of mesodermal cells, useful e.g. for treating
 anemia or ischemia, comprises treatment with functional equivalent of
 protein expressed in embryonic tissue.
 Example 2B; Page 15; 41pp; English.
 The invention describes a novel method of stimulating a population of
 undifferentiated mesodermally derived cells to undergo haematopoiesis
 and/or vascular growth. This involves treating cells with a compound that
 is functionally equivalent to a gene product expressed in an embryo's
 extraembryonic tissue e.g. the hedgehog family including sonic, desert,
 indian, moonrat and tiggly winkle, to modulate differentiation and
 proliferation of mesodermal precursor cells. The method is used to treat
 developmental errors in vascular growth and haematopoiesis in utero, to
 modulate disorders associated with an abnormal number of erythroid cells
 e.g. polycythaemia vera, erythroleukaemia and anaemia (including
 idiopathic, constitutional or secondary aplastic, or myelodysplastic
 forms, where induced by virus, chronic inflammatory disease, cancer,
 organ failure or drugs, or thrombocytopenia) but also leukopenia (caused
 by radiation, chemotherapy or infections) e.g. leukaemia, AIDS, to treat
 tissue ischaemia (specifically myocardial) and hypervascularisation
 associated with genetic or inherited diseases, trauma, infections and
 aging, or neovascularisation, e.g. in tumours, diabetes, arthritis etc.
 This sequence is the haematopoietic marker PECAM-1 (not defined in the
 specification) 3' PCR primer, used with 5' PCR primer AAS16411, to
 demonstrate gastrulation by expression of haematopoietic and endothelial
 markers described in the method of the invention
 Sequence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other;
 Query Match 18.1%; Score 13.2; DB 1; Length 20;
 Best Local Similarity 83.3%; Pred. No. 4.1e+02;
 Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 949 TTAATGTCGCTACCA 966
 20 TTAGTGTTCGCTGCCA 3
 RESULT 83
 ABZ21766/c
 ABZ21766 standard; DNA; 20 BP.
 ABZ21766;
 28-FEB-2003 (first entry)
 Serine/threonine kinase AIM-1 gene antisense oligonucleotide 4.
 Serine/threonine kinase; enzyme; AIM-1; antisense oligonucleotide; human;
 liver cancer; tumour; inhibition; ss.
 Homo sapiens.
 Synthetic.
 CN1358732-A.
 17-JUL-2002.
 11-DEC-2000; 2000CN-00134534.
 11-DEC-2000; 2000CN-00134534.
 (RADI-) INST RADIO MEDICINE MILITARY MEDICAL ACAD.
 Wang S, Lin L, Guan W;
 WPI; 2002-733523/80.
 Antisense oligonucleotide structure and use using serine/threonine kinase
 AIM-1 gene as target.
 Claim 1; Page 1 (Claims); 9pp; Chinese.
 ABZ21763 to ABZ21774 represent antisense oligonucleotides for the
 serine/threonine kinase AIM-1 gene. Also described is a human liver
 cancer (HepG2) cell strain and a Balb/c (nu/nu) nude mouse inoculative
 liver cancer cell which can be used as models for screening and
 evaluation of the 12 antisense oligonucleotides. In vitro studies show
 that the antisense oligonucleotides can effectively inhibit the growth of
 human liver cancer, and have a dose-dependent relationship, and in the
 nude mouse they can also effectively inhibit the growth of cancer, so
 they can be used for treating and reducing tumours and its related
 diseases
 Sequence 20 BP; 9 A; 1 C; 6 G; 4 T; 0 U; 0 Other;
 Query Match 18.1%; Score 13.2; DB 1; Length 20;
 Best Local Similarity 83.3%; Pred. No. 4.1e+02;
 Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 936 CCTCTTCATTCGTTTAA 953
 19 CCTCTCTCTTCGTTTAA 2
 RESULT 84
 ABZ98885
 ID ABZ98885 standard; DNA; 20 BP.
 XX
 AC ABZ98885;
 DT 17-OCT-2003 (first entry)
 XX
 DE Human PDE4A oligonucleotide sequence.
 XX
 KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antischmastic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.
 XX
 OS Homo sapiens.
 XX
 PN WO200285308-A2.
 XX

```
PJ 31-OCT-2002.
XX
XX
XX 23-APR-2002; 2002WO-US013135.
XX
XX 24-APR-2001; 2001US-0286137P.
XX
XX (EPIG-) EPIGENESIS PHARM INC.
XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
XX WPI; 2003-229219/22.
XX
XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
XX Disclosure; SEQ ID NO 14127; 872pp; English.
XX
XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine or
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 20 BP; 0 A; 10 C; 0 G; 10 T; 0 U; 0 Other;
SQ
Query Match 18.1%; Score 13.2; DB 1; Length 20;
Best Local Similarity 83.3%; Pred. No. 4.1e+02;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 927 TTTATCCCTCCTCTTCAT 944
||| |||||
DB 1 TTTCTTCTCCTCTTCCT 18
RESULT 85
ADE43679
ID ADE43679 standard; DNA; 20 BP.
XX
XX ADE43679;
XX
XX 29-JAN-2004 (first entry)
XX
XX Human KNSL1 sequencing primer, SEQ ID 284.
XX
XX Neurodegenerative disease; uPA; SNGC; IDE; KNSL1; LIPA; TNFRSF6;
FW Alzheimer's disease; neuroprotective; nontropic; gene therapy;
FW Chromosome 10; PCR; primer; ss.
XX
XX Homo sapiens.
CS
XX WO2003054143-A2.
FN
XX 03-JUL-2003.
PD
XX 25-OCT-2002; 2002WO-US034679.
PF
```

```
XX 25-OCT-2001; 2001US-0339525P.
PR
PR 08-NOV-2001; 2001US-0336929P.
PR
PR 08-NOV-2001; 2001US-0338010P.
PR
PR 09-NOV-2001; 2001US-0338363P.
PR
PR 04-DEC-2001; 2001US-0337052P.
PR
PR 28-MAR-2002; 2002US-0368919P.
XX
XX (NEUR-) NEUROGENETICS INC.
PA (GEO) GEN HOSPITAL CORP.
XX
XX Becker KD, Velicelebi G, Elliott KJ, Wang X, Tanzi RE, Bertram L;
PI Saunders AJ, Mullin KM, Sampson AJ, Blacker DL;
XX
XX WPI; 2003-559131/52.
XX
XX Determining a predisposition for or the occurrence of neurodegenerative
PT disease, e.g. Alzheimer's disease by detecting in a target nucleic acid
PT the presence or absence of an allelic variant of one or more polymorphic
PT regions.
XX
XX Example 3; Page 290; 848pp; English.
XX
XX The present invention relates to a method (M1) for determining a
CC predisposition for or the occurrence of neurodegenerative disease in a
CC subject. The method comprises detecting in a target nucleic acid obtained
CC from the subject the presence or absence of an allelic variant of one or
CC more polymorphic regions of one or more genes selected from uPA
CC (Urokinase plasminogen activator), SNGC (gamma-synuclein), IDE (insulin-
CC degrading enzyme), KNSL1 (Kinesin-like protein 1), LIPA (lysosomal acid
CC lyase), and TNFRSF6 (tumour Necrosis Factor Receptor-SF6), where the
CC presence of at least one of the allelic variant of one or more
CC polymorphic regions is indicative of a predisposition for or the
CC occurrence of neurodegenerative disease. The genes are all located on
CC chromosome 10. M1 is useful for determining a predisposition for or the
CC occurrence of, and for treating neurodegenerative disease, particularly
CC Alzheimer's disease. The present sequence is a PCR primer, which was used
CC in the method of the invention.
XX
XX Sequence 20 BP; 6 A; 3 C; 4 G; 7 T; 0 U; 0 Other;
SQ
Query Match 18.1%; Score 13.2; DB 1; Length 20;
Best Local Similarity 83.3%; Pred. No. 4.1e+02;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 949 TTAATGATCGCTACCAA 966
||| |||||
DB 3 TGAATGTTTAGTACCAA 20
RESULT 86
ADB42940
ID ADB42940 standard; DNA; 17 BP.
XX
XX ADB42940;
XX
XX 18-DEC-2003 (revised)
DT 04-DEC-2003 (first entry)
XX
XX Tumour suppression/reversion associated nucleotide #3263.
XX
XX cytostatic; antiviral; neuroprotective; nontropic; neuroleptic; ss;
KW primer; probe; tumour suppression; tumour reversion; apoptosis;
KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
KW diagnosis.
XX
XX Homo sapiens.
OS
XX WO2003040369-A2.
FN
XX 15-MAY-2003.
PD
XX 17-SEP-2002; 2002WO-IB004219.
PF
```

```

1 17-SEP-2001; 2001EP-00011981.
2 (MOLFE-) MOLECULAR ENGINES LAB.
3
4 Teherman A, Amson R, Tuijnder M;
5 WPI; 2003-441574/41.
6
7 New nucleic acid encoding human prostate membrane-specific antigen,
8 useful e.g. for treatment of tumors and viral infection, also related
9 polypeptide and antibodies.
10 Disclosure; Page 413; 771pp; French.
11
12 The invention relates to the isolation of 6327 nucleotide sequences,
13 fragments of at least 15 consecutive nucleotides of these nucleotides, a
14 sequence having at least 80% identity, after optimal alignment, with the
15 nucleotides, a sequence that hybridizes under stringent conditions with
16 the nucleotides, or the complement, or corresponding RNA, of the
17 nucleotides. The nucleotides are used as probes or primers for detecting,
18 identifying, quantifying and/or amplifying nucleic acids, as in vitro
19 sense and antisense sequences, of nucleotides involved in tumour
20 suppression or reversion, apoptosis and or viral resistance, to produce
21 recombinant polypeptides, and to prepare transgenic animals, as
22 experimental models. The nucleotides (also vectors containing them and
23 cells containing the vectors), the encoded polypeptides and antibodies
24 (Ab) against the polypeptide are useful for prevention and/or treatment
25 of viral infections or diseases characterized by development of tumours
26 or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
27 Analysis of the expression of the nucleotides can be used for diagnosis
28 and/or prognosis of these diseases. The nucleotides and polypeptides can
29 also be used to screen for their specific interactive molecules,
30 potentially useful for treating diseases associated with abnormal
31 expression of the nucleotides.
32
33 Sequence 17 BP; 2 A; 4 C; 2 G; 9 T; 0 U; 0 Other;
34
35 Query Match 17.8%; Score 13; DB 1; Length 17;
36 Best Local Similarity 100.0%; Pred. No. 4e+02;
37 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
38
39 / 919 CTTTGCCTTTTAT 931
40 |||||
41 5 CTTTGCCTTTTAT 17
42
43 RESULT 87
44 A98826
45 ACA98826 standard; DNA; 19 BP.
46
47 ACA98826;
48
49 28-JUL-2003 (first entry)
50
51 Human CYP2C8 SNP detection PCR primer #266.
52
53 Cytochrome P450 polypeptide 2C8; CYP2C8; arachidonic acid metabolism;
54 cancer; cardiovascular disease; cytostatic; cardiovascular; gene therapy;
55 single nucleotide polymorphism detection; SNP detection; PCR; primer; ss.
56
57 Homo sapiens.
58
59 WO200299099-A2.
60
61 12-DEC-2002.
62
63 31-MAY-2002; 2002WO-EP006000.
64
65 01-JUN-2001; 2001EP-00112899.
66
67 (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
68
69 The invention describes a new polynucleotide comprises a polynucleotide:

```

```

PI Penger A, Sprenger R, Brinkmann U;
XX WPI; 2003-167344/16.
XX
XX New polymorphic variants of the gene encoding Cytochrome P450 polypeptide
XX 2C8 (CYP2C8), useful for diagnosing or treating a disease, e.g.
XX arachidonic acid metabolism, cancer or cardiovascular diseases.
XX
XX Example 2; Page 53; 178pp; English.
XX
XX The invention describes a new polynucleotide comprises a polynucleotide:
XX (a) having any of 101 nucleic acid sequences with 18-19 bp fully defined
XX in the specification; (b) encoding any of seven polypeptides having 7
XX amino acids, or a polypeptide with 3 amino acids; (c) capable of
XX hybridising to a Cytochrome P450 polypeptide 2C8 (CYP2C8) gene; (d)
XX encoding a molecular CYP2C8 variant polypeptide or its fragment. The
XX polynucleotide, gene, vector, polypeptide or antibody is useful for
XX diagnosing or treating a disease, for preparing a diagnostic composition
XX for diagnosing a disease, or for preparing a pharmaceutical composition
XX for treating a disease. This disease includes arachidonic acid
XX metabolism, cancer or cardiovascular diseases. This sequence represents a
XX primer used to isolate regions of the human cytochrome P450 polypeptide
XX 2C8 gene (CYP2C8) in order to identify the single nucleotide polymorphism
XX (SNP) in that region of different individuals useful in disease diagnosis
XX
XX Sequence 19 BP; 3 A; 6 C; 3 G; 6 T; 0 U; 1 Other;
XX
XX Query Match 17.8%; Score 13; DB 1; Length 19;
XX Best Local Similarity 86.7%; Pred. No. 4.3e+02;
XX Matches 13; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 899 CCTGTGCTCACTTTCT 913
XX |||||
XX Db 4 CCTGTGCTCACTTTCT 18
XX
XX RESULT 88
XX ACA98829/C
XX ID ACA98829 standard; DNA; 19 BP.
XX
XX ACA98829;
XX
XX 28-JUL-2003 (first entry)
XX
XX Human CYP2C8 SNP detection PCR primer #269.
XX
XX Cytochrome P450 polypeptide 2C8; CYP2C8; arachidonic acid metabolism;
XX cancer; cardiovascular disease; cytostatic; cardiovascular; gene therapy;
XX single nucleotide polymorphism detection; SNP detection; PCR; primer; ss.
XX
XX Homo sapiens.
XX
XX WO200299099-A2.
XX
XX 12-DEC-2002.
XX
XX 31-MAY-2002; 2002WO-EP006000.
XX
XX 01-JUN-2001; 2001EP-00112899.
XX
XX (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
XX Penger A, Sprenger R, Brinkmann U;
XX WPI; 2003-167344/16.
XX
XX New polymorphic variants of the gene encoding Cytochrome P450 polypeptide
XX 2C8 (CYP2C8), useful for diagnosing or treating a disease, e.g.
XX arachidonic acid metabolism, cancer or cardiovascular diseases.
XX
XX Example 2; Page 53; 178pp; English.
XX
XX The invention describes a new polynucleotide comprises a polynucleotide:

```

CC (a) having any of 101 nucleic acid sequences with 18-19 bp fully defined
 CC in the specification; (b) encoding any of seven polypeptides having 7
 CC amino acids, or a polypeptide with 3 amino acids; (c) capable of
 CC hybridising to a cytochrome P450 polypeptide 2C8 (CYP2C8) gene; (d)
 CC encoding a molecular CYP2C8 variant polypeptide or its fragment. The
 CC polynucleotide, gene, vector, polypeptide or antibody is useful for
 CC diagnosing or treating a disease, for preparing a diagnostic composition
 CC for diagnosing a disease, or for preparing a pharmaceutical composition
 CC for treating a disease. This disease includes arachidonic acid
 CC metabolism, cancer or cardiovascular diseases. This sequence represents a
 CC primer used to isolate regions of the human cytochrome P450 polypeptide
 CC 2C8 gene (CYP2C8) in order to identify the single nucleotide polymorphism
 CC (SNP) in that region of different individuals useful in disease diagnosis
 XX
 SQ Sequence 19 BP; 6 A; 3 C; 6 G; 3 T; 0 U; 1 Other;
 Query Match 17.8%; Score 13; DB 1; Length 19;
 Best Local Similarity 86.7%; Pred. No. 4.3e+02;
 Matches 13; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
 Cy 899 CCCTGGTCATTCTTCT 913
 |||||:|||||
 Fb 16 CCCTGGYCACTTCT 2
 RESULT 89
 ABV83095/c
 ID ABV83095 standard; DNA; 17 BP.
 AC ABV83095;
 DT 03-JAN-2003 (first entry)
 XX
 DE Human HTPL scanning oligonucleotide SEQ ID 4341.
 DE Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
 KW human testis expressed Patched like protein; testis; adrenal; liver;
 KW male germ cell development; bone marrow; brain; kidney; lung; placenta;
 KW prostate; skeletal muscle; colon; male infertility; cancer; ss.
 XX
 OS Homo sapiens.
 XX
 EN EP1229046-A2.
 XX
 PD 07-AUG-2002.
 XX
 PF 28-JAN-2002; 2002EP-00001167.
 XX
 PR 30-JAN-2001; 2001WO-US000663.
 PR 30-JAN-2001; 2001WO-US000664.
 PR 30-JAN-2001; 2001WO-US000665.
 PR 30-JAN-2001; 2001WO-US000667.
 PR 30-JAN-2001; 2001WO-US000668.
 PR 23-MAY-2001; 2001US-00864761.
 PR 09-OCT-2001; 2001US-0327898P.
 XX
 FA (AEOM-) AEOMICA INC.
 XX
 PI Zhan J;
 XX
 UR WPI; 2002-676582/73.
 XX
 PT Novel isolated human testis expressed Patched like protein (HTPL), useful
 PT for identifying agonist and antagonist and specific binding partners, and
 PT for treating subjects having defects in HTPL.
 XX
 PS Example 2; Page 633; 718pp; English.
 XX
 CC The present invention relates to human testis expressed Patched like
 CC protein (HTPL, see ABV78759 to ABV78762 and AB98519 to AB98520). HTPL
 CC has two isoforms, with a few single base pair differences between the
 CC two. One of the single base pair changes introduces a premature stop

CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
 CC shares an overall structure organisation with the Patched protein. The
 CC shared structural features strongly imply that HTPL plays a role similar
 CC to that of Patched, and is a potential tumour suppressor. HTPL is
 CC important in regulating male germ cell development, and the HTPL gene was
 CC mapped to human chromosome 10p12.1. HTPL and its coding sequence are
 CC useful for diagnosing a disorder caused by mutation in HTPL, and in
 CC therapy and manufacture of a medicament for treatment or prevention of
 CC such disorder associated with decreased expression or activity of human
 CC HTPL. Such disorders include disorders of testis, or adrenal, adult and
 CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
 CC skeletal muscle or colon function. HTPL proteins and nucleic acids are
 CC clinically useful as diagnostic markers and potential therapeutic agents for
 CC male infertility and cancer. The present oligonucleotide was used in an
 CC example from the invention
 XX
 SQ Sequence 17 BP; 10 A; 4 C; 2 G; 1 T; 0 U; 0 Other;
 Query Match 17.5%; Score 12.8; DB 1; Length 17;
 Best Local Similarity 87.5%; Pred. No. 4.3e+02;
 Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 Cy 914 TTGGTCTTTGCTTTT 929
 |||||:|||||
 Db 17 TTGGTCTTTGACTTGT 2
 RESULT 90
 ABV83096/c
 ID ABV83096 standard; DNA; 17 BP.
 AC ABV83096;
 XX
 DT 03-JAN-2003 (first entry)
 XX
 DE Human HTPL scanning oligonucleotide SEQ ID 4342.
 XX
 KW Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
 KW human testis expressed Patched like protein; testis; adrenal; liver;
 KW male germ cell development; bone marrow; brain; kidney; lung; placenta;
 KW prostate; skeletal muscle; colon; male infertility; cancer; ss.
 XX
 OS Homo sapiens.
 XX
 EN EP1229046-A2.
 XX
 PD 07-AUG-2002.
 XX
 PF 28-JAN-2002; 2002EP-00001167.
 XX
 PR 30-JAN-2001; 2001WO-US000663.
 PR 30-JAN-2001; 2001WO-US000664.
 PR 30-JAN-2001; 2001WO-US000665.
 PR 30-JAN-2001; 2001WO-US000667.
 PR 30-JAN-2001; 2001WO-US000668.
 PR 23-MAY-2001; 2001US-00864761.
 PR 09-OCT-2001; 2001US-0327898P.
 XX
 FA (AEOM-) AEOMICA INC.
 XX
 PI Zhan J;
 XX
 UR WPI; 2002-676582/73.
 XX
 PT Novel isolated human testis expressed Patched like protein (HTPL), useful
 PT for identifying agonist and antagonist and specific binding partners, and
 PT for treating subjects having defects in HTPL.
 XX
 PS Example 2; Page 633; 718pp; English.
 XX
 CC The present invention relates to human testis expressed Patched like
 CC protein (HTPL, see ABV78759 to ABV78762 and AB98519 to AB98520). HTPL

has two isoforms, with a few single base pair differences between the two. One of the single base pair changes introduces a premature stop codon in HTP-L-S (S for short) compared to HTP-L-L (L for long). HTP-L shares an overall structure organisation with the Patched protein. The shared structural features strongly imply that HTP-L plays a role similar to that of Patched, and is a potential tumour suppressor. HTP-L is important in regulating male germ cell development, and the HTP-L gene was mapped to human chromosome 10p12.1. HTP-L and its coding sequence are useful for diagnosing a disorder caused by mutation in HTP-L, and in therapy and manufacture of a medicament for treatment or prevention of such disorder associated with decreased expression or activity of human HTP-L. Such disorders include disorders of testis, or adrenal, adult and foetal liver, bone marrow, brain, kidney, lung, placenta, prostate, skeletal muscle or colon function. HTP-L proteins and nucleic acids are clinically useful diagnostic markers and potential therapeutic agents for male infertility and cancer. The present oligonucleotide was used in an example from the invention

Sequence 17 BP; 9 A; 4 C; 2 G; 2 T; 0 U; 0 Other;
Query Match 17.5%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 4.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Y 914 TTGGTCTTTGCCCTTT 929
|||||||
b 16 TTGGTCTTTGACTTGT 1

RESULT 91
ABZ60690
ID ABZ60690 standard; DNA; 17 BP.
XX
AC ABZ60690;
XX
DT 21-MAR-2003 (first entry)
XX
DE Human K-Ras DNzyme substrate #802.
XX
KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras; enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV; anti-rheumatic; cancer; AIDS; ss.
XX
OS Homo sapiens.
XX
PN WO200297114-A2.
XX
PD 05-DEC-2002.
XX
PF 29-MAY-2002; 2002WO-US016840.
XX
PR 29-MAY-2001; 2001US-0294140P.
PR 06-JUN-2001; 2001US-0296249P.
PR 10-SEP-2001; 2001US-0318471P.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Telerman A, Anson R, Tuijnder M;
XX
DR WPI; 2003-313353/30.
XX

New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
Disclosure; Page 468; 720pp; French.
The invention relates to a novel isolated 17 mer nucleic acid sequence, given in the specification, a sequence containing at least 15 consecutive nucleotides from the 17 mer sequence, a sequence with, after optimal alignment, at least 80 % identity to the 17 mer sequence, a sequence that hybridizes to them under highly stringent conditions, or the complement of any of them, or the corresponding RNA. The novel isolated nucleic acids of the invention are useful as probes and primers for detecting,

identifying, quantifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as (anti)sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, polypeptides, vectors containing the nucleic acids, cells containing the vector or antibodies directed against the polypeptides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia. Analysis of the expression of the 17 mer nucleic acids in patient samples is useful for diagnosis and/or prognosis of these diseases. The polypeptides can also be used to generate antibodies, and both the polypeptide and antibodies are useful as components of protein chips. The nucleic acid sequences of the invention can be used in gene therapy. This polynucleotide sequence represents a tumour suppression related human fukutin oligonucleotide of the invention

Sequence 17 BP; 3 A; 6 C; 1 G; 7 T; 0 U; 0 Other;
Query Match 17.5%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 4.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 930 ATCCCTCTCTTCATT 945
|||||
Db 2 ATCCCTCTCTTCATT 17

RESULT 92
ABZ60690
ID ABZ60690 standard; RNA; 17 BP.
XX
AC ABZ60690;
XX
DT 21-MAR-2003 (first entry)
XX
DE Human K-Ras DNzyme substrate #802.
XX
KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras; enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV; anti-rheumatic; cancer; AIDS; ss.
XX
OS Homo sapiens.
XX
PN WO200297114-A2.
XX
PD 05-DEC-2002.
XX
PF 29-MAY-2002; 2002WO-US016840.
XX
PR 29-MAY-2001; 2001US-0294140P.
PR 06-JUN-2001; 2001US-0296249P.
PR 10-SEP-2001; 2001US-0318471P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J;
XX
DR WPI; 2003-140484/13.
XX
PT Novel short interfering RNA and enzymatic nucleic acid useful for treating cancer, modulates the expression of a nucleic acid encoding HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
PS Claim 58; Page 100; 185pp; English.
XX
CC The invention relates to a novel short interfering RNA (siRNA) nucleic acid molecule or an enzymatic nucleic acid molecule, that modulates expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras, human immunodeficiency virus (HIV) or a component of HIV. The nucleic acid molecule of the invention has cytostatic, anti-HIV, and anti-rheumatic activity. The nucleic acid molecules are useful for reducing HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are also useful for treating breast, ovarian, colorectal, lung, prostate,

CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC shown in ABZ59899 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC ribozymes of the invention

XX
SQ Sequence 17 BP; 5 A; 2 C; 2 G; 0 T; 8 U; 0 Other;
Query Match 17.5%; Score 12.8; DB 1; Length 17;
Best Local Similarity 43.8%; Pred. No. 4.3e+02;
Matches 7; Conservative 7; Mismatches 2; Indels 0; Gaps 0;

QY 939 CTTGATTCGTTTAAAG 954
|:|:|:|:|:|:|
Cb 2 CUUCAUGUUUAAAG 17

RESULT 93
ADB43905
ID ADB43905 standard; DNA; 17 BP.

XX ADB43905;

XX 18-DEC-2003 (revised)
DT 04-DEC-2003 (first entry)

XX Tumour suppression/reversion associated nucleotide #4228.

XX cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
XX primer; probe; tumour suppression; tumour reversion; apoptosis;
XX virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
XX diagnosis.

XX Homo sapiens.

XX WO2003040369-A2.

XX 15-MAY-2003.

XX 17-SEP-2002; 2002WO-IB004219.

XX 17-SEP-2001; 2001FR-00011981.

XX (MOLE-) MOLECULAR ENGINES LAB.

XX Telerman A, Amson R, Tuijnder M;

XX WPI; 2003-441574/41.

XX New nucleic acid encoding human prostate membrane-specific antigen,
XX useful e.g. for treatment of tumors and viral infection, also related
XX polypeptide and antibodies.

XX Disclosure; Page 526; 771pp; French.

XX The invention relates to the isolation of 6327 nucleotide sequences,
XX fragments of at least 15 consecutive nucleotides of these nucleotides, a
XX sequence having at least 80% identity, after optimal alignment, with the
XX nucleotides, a sequence that hybridizes under stringent conditions with
XX the nucleotides, or the complement, or corresponding RNA, of the
XX nucleotides. The nucleotides are used as probes or primers for detecting,
XX identifying, quantifying and/or amplifying nucleic acids, as in vitro
XX sense and antisense sequences, of nucleotides involved in tumour
XX suppression or reversion, apoptosis and/or viral resistance, to produce
XX recombinant polypeptides, and to prepare transgenic animals, as
XX experimental models. The nucleotides (also vectors containing them and
XX cells containing the vectors), the encoded polypeptides and antibodies
XX (Ab) against the polypeptide are useful for prevention and/or treatment
XX of viral infections or diseases characterized by development of tumours
XX or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
XX Analysis of the expression of the nucleotides can be used for diagnosis
XX and/or prognosis of these diseases. The nucleotides and polypeptides can
XX also be used to screen for their specific interactive molecules,
XX potentially useful for treating diseases associated with abnormal

CC expression of the nucleotides.

XX Sequence 17 BP; 1 A; 7 C; 1 G; 8 T; 0 U; 0 Other;

XX Query Match 17.5%; Score 12.8; DB 1; Length 17;
XX Best Local Similarity 87.5%; Pred. No. 4.3e+02;
XX Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 930 ATCCCTCTCTTCATT 945
|:|:|:|:|:|:|
Db 2 ATCCCTCTCTTCATT 17

RESULT 94
AAV12463/c
ID AAV12463 standard; DNA; 18 BP.

XX AAV12463;

XX 15-MAY-1998 (first entry)

XX Human HP4 prostaglandin receptor PCR antisense primer SEQ ID NO:8.

XX Human; HP4 prostaglandin receptor; adenylate cyclase; drug screening;
XX CAMP; PCR primer; ss.

XX Synthetic.

XX Homo sapiens.

XX US5716835-A.

XX 10-FEB-1998.

XX 05-MAY-1994; 94US-00239431.

XX 05-MAY-1994; 94US-00239431.

XX (ALLR) ALLERGAN INC.

XX Woodward DF, Regan JW, Gil DW;

XX WPI; 1998-144807/13.

XX DNA encoding human HP4 prostaglandin receptor - useful for drug

XX screening.

XX Example 6; Col 10; 15pp; English.

XX The present sequence represents a PCR primer used in the amplification of
XX human HP4 prostaglandin receptor. Transfected cells, containing an HP4
XX prostaglandin receptor expression vector, can be used to screen for
XX substances that bind to the HP4 receptor, for substances that inhibit
XX ligand binding to the HP4 receptor, and for HP4 receptor agonists (based
XX on increased CAMP production in cells pretreated with a phosphodiesterase
XX inhibitor)

XX Sequence 18 BP; 7 A; 4 C; 6 G; 1 T; 0 U; 0 Other;

XX Query Match 17.5%; Score 12.8; DB 1; Length 18;
XX Best Local Similarity 87.5%; Pred. No. 4.5e+02;
XX Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 912 CTTGGTCTTTGCCCT 927
|:|:|:|:|:|:|
Db 17 CTTGGTCTTTGCCAT 2

RESULT 95
AAZ41037
ID AAZ41037 standard; DNA; 18 BP.

XX AAZ41037;

XX

```
F 26-JAN-2000 (first entry)
X
X Cellular inhibitor of apoptosis-2 phosphorothioate antisense oligo #29.
X
X Identification; genetic target; gene modulation; human; probe;
W antisense oligonucleotide; phosphorothioate; PCR primer;
W nucleotide sequence-based technology; antisense drug discovery;
W target validation; ss.
X
X Synthetic.
S Homo sapiens.
S
X WO9553101-A1.
X
X 21-OCT-1999.
D
X
X 13-APR-1999; 99WO-US008268.
X
X 13-APR-1998; 98US-0081483P.
R
X 28-APR-1998; 98US-00067638.
R
X (ISIS-) ISIS PHARM INC.
A
X
X Cowsett LM, Baker BF, Mcneil J, Freier SM, Sasmor HM, Brooks DG;
I Ohasi C, Wyatt JR, Borchers AH, Vickers TA;
I
X WPI; 1999-620446/53.
X
X Identifying compounds which modulate expression of nucleic acids, used to
I provide compounds having defined physical, chemical or bioactive
I properties, e.g. antisense activity.
I
X Example 21; Page 101; 264pp; English.
X
X A method has been developed of defining a set of compounds that modulate
I the expression of a target nucleic acid (tNA) sequence via binding of the
I compounds with the tNA sequence. The method comprises generating a
I library of virtual compounds in silico according to defined criteria, and
I evaluating in silico the binding of the virtual compounds with the tNA
I according to defined criteria. Also described are: (1) a method of
I defining a set of oligonucleotides (ONS) that modulate the expression of
I a tNA sequence via binding of the ONS with the tNA sequence comprising
I generating a library of virtual compounds in silico according to defined
I criteria, and evaluating in silico the binding of the virtual ONS with
I the tNA according to defined criteria; and (2) a method of defining a set
I of compounds that modulate the expression of a tNA sequence via binding
I of the compounds with the tNA. The methods can be used for the generation
I and identification of synthetic compounds having defined physical,
I chemical or bioactive properties. Information gathered from assays of
I such compounds is used to identify nucleic acid sequences that are
I tractable to a variety of nucleotide sequence-based technologies, e.g.
I antisense drug discovery and target validation. AAZ40852 to AAZ41220, and
I AAY52701 to AAY52706, represent sequences used in the exemplification of
I the present invention
I
X Sequence 18 BP; 0 A; 9 C; 0 G; 9 T; 0 U; 0 Other;
X
X Query Match 17.5%; Score 12.8; DB 1; Length 18;
X Best Local Similarity 87.5%; Pred. No. 4.5e+02;
X Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
X
X 927 TTTATCCCTCCTCTTC 942
X ||||| |||||
X 1 TTCTCTCTCTCTCTTC 16
X
X RESULT 97
X ABK88473/c
X ID ABK88473 standard; DNA; 18 BP.
X
X AC
X AC ABK88473;
X
X 07-OCT-2002 (first entry)
X
X Human HP4 prostaglandin receptor RT-PCR primer #2.
X
X Human; ss; PCR; HP4; human placental clone number 4; EP2; primer;
X prostaglandin receptor; antiasthmatic; antiinflammatory;
X bronchopulmonary inflammation; asthma; inflammation;
X antisense gene therapy; reverse transcriptase PCR.
X
X Homo sapiens.
OS
X
X US6395878-B1.
PN
X
X 28-MAY-2002.
PD
X
X 12-MAR-1999; 99US-00267423.
PF
X
X 05-MAY-1994; 94US-00239431.
PR
```

```
XX
DE Human c-IAP-2 mRNA inhibiting antisense oligo ISIS #23440.
XX
KW Cellular Inhibitor of Apoptosis-2; antisense; diagnostic; therapeutic;
KW c-IAP-2; prophylaxis; infection; inflammation; tumor formation; ss.
XX
OS Synthetic.
OS
XX Homo sapiens.
XX
XX US5958771-A.
PN
XX
XX 28-SEP-1999.
PD
XX
XX 03-DEC-1998; 98US-00205144.
PF
XX
XX 03-DEC-1998; 98US-00205144.
PR
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Bennett CF, Cowsett LM, Ackermann EJ;
PI
XX WPI; 1999-561046/47.
XX
XX Antisense compounds complementary to Cellular Inhibitor of Apoptosis-2
PT useful for e.g. diagnostics, therapeutics, and as research reagents.
PT
XX
XX Example 15; Col 39; 33pp; English.
XX
XX The invention provides antisense compounds of 8-30 nucleotides that
CC inhibit the expression of human Cellular Inhibitor of Apoptosis-2 (c-IAP-
CC 2). The antisense compounds may be used for diagnostics, therapeutics
CC (for modulating the expression of c-IAP-2), prophylaxis (e.g. to prevent
CC or delay infection, inflammation, or tumor formation), as research
CC reagents (e.g. to distinguish between members of a biological pathway)
CC and in kits. Sequences AAZ2103-142 represent phosphorothioate
CC oligonucleotides used for antisense inhibition of cellular inhibitor of
CC apoptosis-2
XX
XX Sequence 18 BP; 0 A; 9 C; 0 G; 9 T; 0 U; 0 Other;
SQ
XX
XX Query Match 17.5%; Score 12.8; DB 1; Length 18;
XX Best Local Similarity 87.5%; Pred. No. 4.5e+02;
XX Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 927 TTTATCCCTCCTCTTC 942
XX ||||| |||||
XX 1 TTCTCTCTCTCTCTTC 16
XX
XX RESULT 97
XX ABK88473/c
XX ID ABK88473 standard; DNA; 18 BP.
XX
XX AC
XX AC ABK88473;
XX
XX 07-OCT-2002 (first entry)
XX
XX Human HP4 prostaglandin receptor RT-PCR primer #2.
XX
XX Human; ss; PCR; HP4; human placental clone number 4; EP2; primer;
XX prostaglandin receptor; antiasthmatic; antiinflammatory;
XX bronchopulmonary inflammation; asthma; inflammation;
XX antisense gene therapy; reverse transcriptase PCR.
XX
XX Homo sapiens.
OS
XX
XX US6395878-B1.
PN
XX
XX 28-MAY-2002.
PD
XX
XX 12-MAR-1999; 99US-00267423.
PF
XX
XX 05-MAY-1994; 94US-00239431.
PR
```



```

PR 05-FEB-1998; 98US-00019393.
XX (ALLR ) ALLERGAN SALES INC.
PA
XX
PI Regan JW, Gil DM, Woodward DF;
XX
ER WPI; 2002-572852/61.
XX
XX New full length human prostaglandin human placental clone member 4
PT polypeptide useful in the development of treatments for bronchopulmonary
PT inflammation and asthma, and for regulating inflammation.
XX
XX Claim 12; Col 10; 16pp; English.
XX
XX The invention relates to an isolated polypeptide comprising a full length
CC human prostaglandin (human placental clone number 4) HP4 receptor, where
CC the amino acid sequence of the receptor is encoded by nucleotide sequence
CC contained within an open reading frame of plasmid HS/HP4, American Type
CC Culture Collection (ATCC) accession number 97472. Also included are a
CC polypeptide comprising a fragment of HP4, where the fragment comprises an
CC amino acid sequence encoded by 18 consecutive nucleotides of a nucleotide
CC sequence region flanked by primers of appearing as ABK88470 and ABK88471
CC and the fragment binds an anti-HP4 antibody, and a composition comprising
CC the isolated fragment of the human prostaglandin HP4 receptor. The HP4
CC receptor (which has prostaglandin EP2 receptor pharmacological activity)
CC is useful for determining the specific processes mediated by HP4 receptor
CC and in the development of treatments for bronchopulmonary inflammation
CC and asthma, and in regulating inflammation. HP4 is also useful for
CC identifying compounds for utilising as therapeutic agents. HP4 is useful
CC in binding assays in particular for identifying HP4 receptor agonist and
CC antagonist. The HP4 fragment is useful in situ hybridisation and for
CC generating antibodies against HP4 receptor epitopes that allows
CC immunohisto-chemical localisation of the protein in cells, tissues, and
CC body fluids, and thus identifying a cell expressing the HP4 receptor
CC subtype. A composition comprising a fragment of HP4 polynucleotide is
CC useful for decreasing or preventing translation of human HP4
CC prostaglandin receptor (i.e. antisense gene therapy). The present
CC sequence is a reverse transcriptase (RT)-PCR primer used to amplify a
CC region of the HP4 prostaglandin receptor mRNA corresponding to the second
CC extracellular loop and seventh transmembrane domain
XX
SQ Sequence 18 BP; 7 A; 4 C; 6 G; 1 T; 0 U; 0 Other;
Query Match 17.5%; Score 12.8; DB 1; Length 18;
Best Local Similarity 87.5%; Pred. No. 4.5e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 912 CTTTGGTCTTGCCCTT 927
DQ ||| ||||| ||||| ||
17 CTTGGGCTTTGCCAT 2

RESULT 98
ABK15756/c
ID ABK15756 standard; DNA; 18 BP.
XX
XX ABK15756;
XX
XX 08-MAY-2002 (first entry)
XX
XX Prostaglandin receptor EP2 antisense PCR primer DNA sequence.
XX
XX Human; cyclooxygenase-2; COX-2; PCR; primer; sepsis; pancreatitis; burn;
XX trauma; blood aloss; penetrating injury; septic shock; pneumonia;
XX septicemia; bacteremia; urinary tract infection; wound infection;
XX drug reaction; systemic inflammatory response syndrome; PGE_2;
XX prostaglandin E_2; receptor; EP2; ss.
XX
XX Homo sapiens.
XX
XX US2002006915-A1.
XX
XX 17-JAN-2002.

```

```

XX 14-FEB-2001; 2001US-00782936.
PF
XX
XX 15-FEB-2000; 2000US-0182524P.
PR
XX
XX (STRO// MACK STRONG V E.
PA (STAP//) STAPLETON P P.
PA (DALY//) DALY J M.
XX
XX Mack Strong VE, Stapleton PP, Daly JM;
PI WPI; 2002-179019/23.
XX
XX Treating a patient at risk for systemic inflammatory response syndrome
PT e.g. trauma involves administering cyclooxygenase-2 inhibitor or a drug.
XX
XX Example 5; Page 10; 39pp; English.
XX
XX The present invention relates to a new method of treating a patient at
CC risk for systemic inflammatory response syndrome. The method involves
CC administering a selective cyclooxygenase-2 inhibitor or a drug which
CC stimulates at least one prostaglandin E2 (PGE 2) receptor or a drug
CC which interferes with binding of PGE 2 to at least one of PGE 2
CC receptors. The invention can be used for treating a patient at risk for
CC systemic inflammatory response syndrome e.g. sepsis, pancreatitis, burns,
CC trauma, life threatening blood loss from penetrating injury, or a patient
CC who has undergone surgery, septic shock, infections such as pneumonia,
CC septicemia, bacteraemia, urinary tract infection, wound infection or
CC drug reaction and can also be used for beneficial immune modulation. The
CC inhibitor or the drugs selectively modulate the immune response after
CC trauma, reduce the incidence of infectious complications and improve
CC survival after traumatic injury. The present nucleic acid sequence
CC represents the human prostaglandin receptor EP2 antisense PCR primer that
CC was used in the invention with the EP2 sense PCR primer (ABK15755) for
CC peripheral blood mononuclear cell RNA preparation
XX
SQ Sequence 18 BP; 7 A; 4 C; 6 G; 1 T; 0 U; 0 Other;
Query Match 17.5%; Score 12.8; DB 1; Length 18;
Best Local Similarity 87.5%; Pred. No. 4.5e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 912 CTTTGGTCTTGCCCTT 927
DQ ||| ||||| ||||| ||
17 CTTGGGCTTTGCCAT 2

RESULT 99
ABS57306/c
ID ABS57306 standard; DNA; 18 BP.
XX
XX ABS57306;
XX
XX 31-JAN-2003 (first entry)
XX
XX PCR primer #2 for DNA encoding human placental clone number 4 (HP4).
XX
XX Human; EP prostaglandin receptor; human placental clone number 4; HP4;
XX adenylyate cyclase; chronic asthma; immunosuppression; antiasthmatic; PCR;
XX primer; ss.
XX
XX Homo sapiens.
XX
XX US2002128445-A1.
XX
XX 12-SEP-2002.
XX
XX 28-MAR-2002; 2002US-00108714.
XX
XX 05-MAY-1994; 94US-00239431.
PR 05-FEB-1998; 98US-00019393.
XX 12-MAR-1999; 99US-00267423.
XX

```

```

(UVAR-) UNIV ARIZONA STATE.
Regan JW, Gil DW, Woodward DF;
WPI; 2003-066913/06.
Novel isolated human prostaglandin HP4 receptor polypeptide encoded by
plasmid KS/HP4, useful to stimulate adenylate cyclase activity in
response to prostaglandins or to raise antibodies against HP4 receptor
epitopes.
Example 6; Page 5; 12pp; English.
The present invention relates to a gene encoding a novel human EP
prostaglandin receptor, referred to as human placental clone number 4
(HP4). Also described is a vector, KS/HP4 (pBluescript HP4 clone), used
for the expression of HP4 in eukaryotic cells. The HP4 receptor, when
expressed in eukaryotic cells, is capable of binding prostaglandins and
their analogues, and stimulating adenylate cyclase activity in response
to prostaglandins. The HP4 receptor is useful for studying the
pharmacology, cellular distribution, and expression of the HP4 receptor.
It is also useful as an antigen to raise antibodies against HP4 receptor
epitopes, in binding assays for identifying HP4 receptor agonists and
antagonists, and for screening compounds able to bind to the
prostaglandin HP4 receptor. A composition comprising an antisense agent
able to inhibit or prevent translation of the HP4 receptor in vivo is
useful for attenuating the effects of endogenous HP4 receptor agonists in
patients having conditions such as chronic asthma or immunosuppression,
and for treating the above conditions. The present sequence represents a
PCR primer for DNA encoding HP4
Sequence 18 BP; 7 A; 4 C; 6 G; 1 T; 0 U; 0 Other;
Query Match 17.5%; Score 12.8; DB 1; Length 18;
Best Local Similarity 87.5%; Pred. No. 4.5e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
/ 912 CTTGGTCTTGGCTT 927
/ 17 CTTGGTCTTGGCAT 2
RESULT 100
AD60507
/ AAD60507 standard; DNA; 18 BP.
/ AAD60507;
/ 18-DEC-2003 (first entry)
/ Human c-IAP-2 antisense oligonucleotide #IS15 #23480.
/ Human; antisense; cellular inhibitor of apoptosis-2; c-IAP-2; cancer;
/ hyperproliferative condition; apoptosis inhibitor 2; autoimmune disease;
/ API-1; hIAP-1; MIRC; gene therapy; phosphorothioate; ss.
/ Homo sapiens.
/ Synthetic.
1 Key Location/Qualifiers
modified_base 1..18
/*tag= a
/mod_base= OTHER
/note= "Phosphorothioate backbone; All cytidine residues
are 5-methylcytidines"
modified_base 1..4
/*tag= b
/mod_base= OTHER
/note= "2'-methoxyethyl (2'-MOE) nucleotides"
modified_base 15..18
/*tag= c
/mod_base= OTHER
/note= "2'-methoxyethyl (2'-MOE) nucleotides"

```

```

XX US2003083300-A1.
XX 01-MAY-2003.
XX 16-JUL-2002; 2002US-00197290.
XX 23-SEP-1999; 99WO-US022083.
XX 04-OCT-2001; 2001US-00857299.
XX (BENN/) BENNETT C F.
XX (ACKRE/) ACKERMANN E J.
XX (COWS/) COWSERT L M.
XX Bennett CF, Ackermann EJ, Cowsert LM;
XX WPI; 2003-755119/71.
XX New antisense compound, preferably an oligonucleotide, for inhibiting
XX expression of human Cellular Inhibitor of Apoptosis-2 in human cells or
XX tissues, and for treating diseases, such as cancer or an autoimmune
XX disease.
XX Example 16; Page 22; 34pp; English.
XX The invention relates to antisense compounds targetted to a nucleic acid
XX encoding human cellular inhibitor of apoptosis-2 (also known as c-IAP-2,
XX apoptosis inhibitor 2, API-1, hIAP-1 and MIRC) to inhibit its expression.
XX Antisense compounds of the invention are used to induce apoptosis in
XX human cells or tissues to treat diseases or conditions associated with
XX insufficient apoptosis. They are used to treat diseases or conditions
XX associated with c-IAP-2 such as hyperproliferative conditions especially
XX cancer or autoimmune diseases. The invention is also useful in antisense
XX gene therapy. The present sequence is an antisense oligonucleotide
XX targetted to human c-IAP-2 DNA
XX Sequence 18 BP; 0 A; 9 C; 0 G; 9 T; 0 U; 0 Other;
XX Query Match 17.5%; Score 12.8; DB 1; Length 18;
XX Best Local Similarity 87.5%; Pred. No. 4.5e+02;
XX Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 927 TTTATCCCTCTCTTC 942
Db 1 TTTCTCTCTCTCTTC 16
RESULT 101
AAZ75939/c
ID AAZ75939 standard; DNA; 19 BP.
XX AAZ75939;
XX 10-SEP-2001 (first entry)
XX Human biallelic marker downstream amplification primer SEQ ID NO:10295.
XX Human genome; biallelic marker; high density disequilibrium map;
XX genomic map; haplotype; phenotype; polymorphic base; genotyping;
XX haplotyping; hybridisation; identification; characterisation;
XX amplification; single nucleotide polymorphism; SNP; PCR primer;
XX diagnosis; ss.
XX Homo sapiens.
XX WO9954500-A2.
XX 28-OCT-1999.
XX 21-APR-1999; 99WO-IB000822.
XX 21-APR-1998; 98US-0082614P.
XX 23-NOV-1998; 98US-0109732P.

```

```

XX (GSET ) GENSET.
XX PA Cohen D, Blumenfeld M, Chumakov I;
XX PT WPI; 2000-013267/01.
XX DR
XX Novel biallelic markers used to construct a high density disequilibrium
XX map of the human genome.
XX
XX Claim 9; Page 2425; 2745pp; English.
XX
XX AAZ65654 to AAZ69578 represent human biallelic markers from the present
XX invention, which contain a polymorphic base at position 24 of their
XX nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
XX primers for the biallelic markers. The biallelic markers of the invention
XX have a variety of uses: they can be used for high density mapping of the
XX human genome, and in complex association studies and haplotyping studies
XX which are useful in determining the genetic basis for disease states.
XX Compositions and methods of the invention can also be useful for the
XX identification of the targets for the development of pharmaceutical
XX agents and diagnostic methods, as well as the characterization of the
XX differential efficacious responses to and side effects from
XX pharmaceutical agents acting on a disease as well as other treatment.
XX N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
XX 3367, are not actually given a sequence in the Sequence Listing from the
XX present invention
XX
XX Sequence 19 BP; 8 A; 6 C; 3 G; 2 T; 0 U; 0 Other;
SQ
Query Match 17.5%; Score 12.8; DB 1; Length 19;
Best Local Similarity 87.5%; Pred. No. 4.6e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

CY 909 TTTCTTTGGTCTTGGC 924
Db 18 TTTCTTTGGTCTTGGC 3

RESULT 102
AAF49432
ID AAF49432 standard; DNA; 15 BP.
AC AAF49432;
XX
XX 30-MAR-2001 (first entry)
XX
XX IGF-I oligonucleotide #392.
XX
XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
XX cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
XX skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;
XX IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
XX growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
XX keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
XX hyperneovascular condition; hyperplasia; kidney disease;
XX neovascular condition of the retina; ss.
XX
XX Homo sapiens.
XX
XX WO200078341-A1.
XX
XX 28-DEC-2000.
XX
XX 21-JUN-2000; 2000WO-AU000693.
XX
XX 21-JUN-1999; 99US-0140345P.
XX
XX (MURD-) MURDOCH CHILDRENS RES INST.
XX
XX Wraight CJ, Werther GA, Edmondson SR;
XX
XX WPI; 2001-041421/05.

```

```

XX
XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering
XX UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
XX inhibits or reduces growth factor mediated cell proliferation and/or
XX inflammation.
XX
XX Example 8; Page 63; 201pp; English.
XX
XX The present invention relates to a method for ameliorating the effects of
XX skin disorders. The method comprises contacting the skin with an
XX antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
XX receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
XX inhibiting or reducing growth factor mediated cell proliferation,
XX inflammation and/or other disorders. The present sequence is an
XX oligonucleotide which can be used to design the antisense
XX oligonucleotides of the present invention (see AAF45151 and AAF45153-
XX F45161). The method is useful for ameliorating the effects of psoriasis,
XX ichthyosis, ptyriasis, ruba, pilaris, serborrhea, keloids, keratosis,
XX neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
XX hyperneovascular condition such as a neovascular condition of the retina,
XX brain or skin, growth factor-mediated malignancies, other sclerotic
XX disease, kidney disease, hyperproliferation of the inside of blood
XX vessels or any other hyperplasia
XX
XX Sequence 15 BP; 1 A; 6 C; 3 G; 5 T; 0 U; 0 Other;
SQ
Query Match 17.0%; Score 12.4; DB 1; Length 15;
Best Local Similarity 92.9%; Pred. No. 4.6e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 899 CCTGGTCACTTTC 912
Db 1 CCTGGTCACTTTC 14

RESULT 103
AAF49431
ID AAF49431 standard; DNA; 15 BP.
AC AAF49431;
XX
XX 30-MAR-2001 (first entry)
XX
XX IGF-I oligonucleotide #391.
XX
XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
XX cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
XX skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;
XX IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
XX growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
XX keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
XX hyperneovascular condition; hyperplasia; kidney disease;
XX neovascular condition of the retina; ss.
XX
XX Homo sapiens.
XX
XX WO200078341-A1.
XX
XX 28-DEC-2000.
XX
XX 21-JUN-2000; 2000WO-AU000693.
XX
XX 21-JUN-1999; 99US-0140345P.
XX
XX (MURD-) MURDOCH CHILDRENS RES INST.
XX
XX Wraight CJ, Werther GA, Edmondson SR;
XX
XX WPI; 2001-041421/05.
XX
XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering
XX UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
XX inhibits or reduces growth factor mediated cell proliferation and/or
XX

```

```

1 inflammation.
2
3 Example 8; Page 63; 201pp; English.
4
5 The present invention relates to a method for ameliorating the effects of
6 skin disorders. The method comprises contacting the skin with an
7 antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
8 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
9 inhibiting or reducing growth factor mediated cell proliferation,
10 inflammation and/or other disorders. The present sequence is an
11 oligonucleotide which can be used to design the antisense
12 oligonucleotides of the present invention (see AAF45151 and AAF45153-
13 F45161). The method is useful for ameliorating the effects of psoriasis,
14 ichthyosis, pityriasis, ruba, pilaris, seborrheoa, keloids, keratosis,
15 neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
16 hyperneovascular condition such as a neovascular condition of the retina,
17 brain or skin, growth factor-mediated malignancies, other sclerotic
18 disease, kidney disease, hyperproliferation of the inside of blood
19 vessels or any other hyperplasia
20
21 Sequence 15 BP; 1 A; 6 C; 3 G; 5 T; 0 U; 0 Other;
22
23 Query Match 17.0%; Score 12.4; DB 1; Length 15;
24 Best Local Similarity 92.9%; Pred. No. 4.6e+02;
25 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
26
27 1 899 CCTGTCATTTTC 912
28 2 CCTGTCATCTTC 15
29
30 RESULT 104
31 3V83098/C
32 3 ABV83098 standard; DNA; 17 BP.
33
34 3 ABV83098;
35
36 03-JAN-2003 (first entry)
37
38 Human HTPL scanning oligonucleotide SEQ ID 4344.
39
40 Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
41 human testis expressed Patched like protein; testis; adrenal; liver;
42 male germ cell development; bone marrow; brain; kidney; lung; placenta;
43 prostate; skeletal muscle; colon; male infertility; cancer; ss.
44
45 Homo sapiens.
46
47 EF1229046-A2.
48
49 07-AUG-2002.
50
51 28-JAN-2002; 2002EP-00001167.
52
53 30-JAN-2001; 2001WO-US000663.
54 30-JAN-2001; 2001WO-US000664.
55 30-JAN-2001; 2001WO-US000665.
56 30-JAN-2001; 2001WO-US000667.
57 30-JAN-2001; 2001WO-US000668.
58 30-JAN-2001; 2001WO-US000669.
59 23-MAY-2001; 2001US-00864761.
60 09-OCT-2001; 2001US-0327898P.
61
62 (AEOM-) AEOMICA INC.
63
64 Zhan J;
65
66 WPI; 2002-676582/73.
67
68 Novel isolated human testis expressed Patched like protein (HTPL), useful
69 for identifying agonist and antagonist and specific binding partners, and
70 for treating subjects having defects in HTPL.
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100
101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
163
164
165
166
167
168
169
170
171
172
173
174
175
176
177
178
179
180
181
182
183
184
185
186
187
188
189
190
191
192
193
194
195
196
197
198
199
200
201
202
203
204
205
206
207
208
209
210
211
212
213
214
215
216
217
218
219
220
221
222
223
224
225
226
227
228
229
230
231
232
233
234
235
236
237
238
239
240
241
242
243
244
245
246
247
248
249
250
251
252
253
254
255
256
257
258
259
260
261
262
263
264
265
266
267
268
269
270
271
272
273
274
275
276
277
278
279
280
281
282
283
284
285
286
287
288
289
290
291
292
293
294
295
296
297
298
299
300
301
302
303
304
305
306
307
308
309
310
311
312
313
314
315
316
317
318
319
320
321
322
323
324
325
326
327
328
329
330
331
332
333
334
335
336
337
338
339
340
341
342
343
344
345
346
347
348
349
350
351
352
353
354
355
356
357
358
359
360
361
362
363
364
365
366
367
368
369
370
371
372
373
374
375
376
377
378
379
380
381
382
383
384
385
386
387
388
389
390
391
392
393
394
395
396
397
398
399
400
401
402
403
404
405
406
407
408
409
410
411
412
413
414
415
416
417
418
419
420
421
422
423
424
425
426
427
428
429
430
431
432
433
434
435
436
437
438
439
440
441
442
443
444
445
446
447
448
449
450
451
452
453
454
455
456
457
458
459
460
461
462
463
464
465
466
467
468
469
470
471
472
473
474
475
476
477
478
479
480
481
482
483
484
485
486
487
488
489
490
491
492
493
494
495
496
497
498
499
500
501
502
503
504
505
506
507
508
509
510
511
512
513
514
515
516
517
518
519
520
521
522
523
524
525
526
527
528
529
530
531
532
533
534
535
536
537
538
539
540
541
542
543
544
545
546
547
548
549
550
551
552
553
554
555
556
557
558
559
560
561
562
563
564
565
566
567
568
569
570
571
572
573
574
575
576
577
578
579
580
581
582
583
584
585
586
587
588
589
590
591
592
593
594
595
596
597
598
599
600
601
602
603
604
605
606
607
608
609
610
611
612
613
614
615
616
617
618
619
620
621
622
623
624
625
626
627
628
629
630
631
632
633
634
635
636
637
638
639
640
641
642
643
644
645
646
647
648
649
650
651
652
653
654
655
656
657
658
659
660
661
662
663
664
665
666
667
668
669
670
671
672
673
674
675
676
677
678
679
680
681
682
683
684
685
686
687
688
689
690
691
692
693
694
695
696
697
698
699
700
701
702
703
704
705
706
707
708
709
710
711
712
713
714
715
716
717
718
719
720
721
722
723
724
725
726
727
728
729
730
731
732
733
734
735
736
737
738
739
740
741
742
743
744
745
746
747
748
749
750
751
752
753
754
755
756
757
758
759
760
761
762
763
764
765
766
767
768
769
770
771
772
773
774
775
776
777
778
779
780
781
782
783
784
785
786
787
788
789
790
791
792
793
794
795
796
797
798
799
800
801
802
803
804
805
806
807
808
809
810
811
812
813
814
815
816
817
818
819
820
821
822
823
824
825
826
827
828
829
830
831
832
833
834
835
836
837
838
839
840
841
842
843
844
845
846
847
848
849
850
851
852
853
854
855
856
857
858
859
860
861
862
863
864
865
866
867
868
869
870
871
872
873
874
875
876
877
878
879
880
881
882
883
884
885
886
887
888
889
890
891
892
893
894
895
896
897
898
899
900
901
902
903
904
905
906
907
908
909
910
911
912
913
914
915
916
917
918
919
920
921
922
923
924
925
926
927
928
929
930
931
932
933
934
935
936
937
938
939
940
941
942
943
944
945
946
947
948
949
950
951
952
953
954
955
956
957
958
959
960
961
962
963
964
965
966
967
968
969
970
971
972
973
974
975
976
977
978
979
980
981
982
983
984
985
986
987
988
989
990
991
992
993
994
995
996
997
998
999
1000

```

PT for treating subjects having defects in HTPL.
XX Example 2; Page 633; 718pp; English.
XX
CC The present invention relates to human testis expressed Patched like
CC protein (HTPL, see ABV78759 to ABV78762 and AB98519 to AB98520). HTPL
CC has two isoforms, with a few single base pair differences between the
CC two. One of the single base pair changes introduces a premature stop
CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
CC shares an overall structure organisation with the Patched protein. The
CC shared structural features strongly imply that HTPL plays a role similar
CC to that of Patched, and is a potential tumour suppressor. HTPL is
CC important in regulating male germ cell development, and the HTPL gene was
CC mapped to human chromosome 10p12.1. HTPL and its coding sequence are
CC useful for diagnosing a disorder caused by mutation in HTPL, and in
CC therapy and manufacture of a medicament for treatment or prevention of
CC such disorder associated with decreased expression or activity of human
CC HTPL. Such disorders include disorders of testis, or adrenal, adult and
CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
CC skeletal muscle or colon function. HTPL proteins and nucleic acids are
CC clinically useful diagnostic markers and potential therapeutic agents for
CC male infertility and cancer. The present oligonucleotide was used in an
CC example from the invention
XX
SQ Sequence 17 BP; 8 A; 4 C; 2 G; 3 T; 0 U; 0 Other;
Query Match 17.0%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 5e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 914 TTGGTCCTTGCTT 927
Dd 15 TTGGTCCTTGACTT 2
RESULT 106
ABT36385
ID ABT36385 standard; DNA; 17 BP.
XX
AC ABT36385;
XX
CT 12-JUN-2003 (first entry)
XX
DE Tumour suppression related human fukutin oligo SEQ ID No 2022.
XX
KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrenia; protein chip; gene therapy; tumour suppression;
KW human fukutin; ds.
XX
CS Homo sapiens.
XX
FN WO2003025175-A2.
XX
FD 27-MAR-2003.
XX
FE 17-SEP-2002; 2002WO-IB004208.
XX
FR 17-SEP-2001; 2001FR-00011978.
XX
FA (MOLE-) MOLECULAR ENGINES LAB.
PI Telerman A, Amson R, Tuijnder M;
XX
DR WPI; 2003-313353/30.
XX
PT New isolated nucleic acid, useful for treating viral diseases associated
PT with tumors and cell degeneration, also related polypeptides, antibodies
PT and transfected cells.
PS Disclosure; Page 269; 720pp; French.
XX
CC The invention relates to a novel isolated 17 mer nucleic acid sequence,

CC given in the specification, a sequence containing at least 15 consecutive
CC nucleotides from the 17 mer sequence, a sequence with, after optimal
CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that
CC hybridizes to them under highly stringent conditions, or the complement
CC of any of them, or the corresponding RNA. The novel isolated nucleic
CC acids of the invention are useful as probes and primers for detecting,
CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
CC component of a gene chip, in vitro as (anti)sense reagents, and for
CC production of recombinant polypeptides. Any of the nucleic acids,
CC polypeptides, vectors containing the nucleic acids, cells containing the
CC vector or antibodies directed against the polypeptides are useful for
CC preparation of pharmaceuticals for prevention and/or treatment of viral
CC diseases that are characterised by development of tumours or cell
CC degeneration, specifically cancer but also Alzheimer's disease and
CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
CC patient samples is useful for diagnosis and/or prognosis of these
CC diseases. The polypeptides can also be used to generate antibodies, and
CC both the polypeptide and antibodies are useful as components of protein
CC chips. The nucleic acid sequences of the invention can be used in gene
CC therapy. This polynucleotide sequence represents a tumour suppression
CC related human fukutin oligonucleotide of the invention
XX
SQ Sequence 17 BP; 1 A; 2 C; 4 G; 10 T; 0 U; 0 Other;
Query Match 17.0%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 5e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 911 TCTTGGTCCTTGC 924
Dd 3 TCTTGGTCCTTGC 16
RESULT 107
ACD50661
ID ACD50661 standard; RNA; 17 BP.
XX
AC ACD50661;
XX
DT 23-SEP-2003 (first entry)
XX
DE HBV hammerhead ribozyme substrate sequence #178.
XX
KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW RNA stability; RNA expression; RNA synthesis; antisense;
KW enzymatic nucleic acid; hammerhead ribozyme; DNzyme; inozyme; zinzyme;
KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW HBV reverse transcriptase; Enhancer I region; viral replication;
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW virucide; antiinflammatory; substrate; ss.
XX
OS Hepatitis B virus.
XX
PN WO200281494-A1.
XX
PD 17-OCT-2002.
XX
PF 26-MAR-2002; 2002WO-US009187.
XX
PR 26-MAR-2001; 2001US-00817879.
PR 08-JUN-2001; 2001US-00877478.
PR 08-JUN-2001; 2001US-0296876P.
PR 24-OCT-2001; 2001US-0335059P.
PR 05-DEC-2001; 2001US-0337055P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MACE/) MACEJAK D.
PA (MCSW/) MCSWISSEN J.
PA (MORR/) MORRISSEY D.
PA (PAVC/) PAVCO P.
PA (LEEP/) LEE P.

CC nucleotides. The nucleotides are used as probes or primers for detecting,
 CC identifying, quantifying and/or amplifying nucleic acids, as in vitro
 CC sense and antisense sequences, of nucleotides involved in tumour
 CC suppression or reversion, apoptosis and or viral resistance, to produce
 CC recombinant polypeptides, and to prepare transgenic animals, as
 CC experimental models. The nucleotides (also vectors containing them and
 CC cells containing the vectors), the encoded polypeptides and antibodies
 CC (Ab) against the polypeptide are useful for prevention and/or treatment
 CC of viral infections or diseases characterized by development of tumours
 CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
 CC Analysis of the expression of the nucleotides can be used for diagnosis
 CC and/or prognosis of these diseases. The nucleotides and polypeptides can
 CC also be used to screen for their specific interactive molecules,
 CC potentially useful for treating diseases associated with abnormal
 CC expression of the nucleotides.

XX
 SQ Sequence 17 BP; 3 A; 9 C; 1 G; 4 T; 0 U; 0 Other;
 Query Match 17.0%; Score 12.4; DB 1; Length 17;
 Best Local Similarity 92.9%; Pred. No. 5e+02; Indels 0; Gaps 0;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 930 ATCCCTCTCTTCA 943
 DQ 2 ATCCCACTCTTCA 15
 ||||| |||||

RESULT 110
 ADB40322
 ID ADB40322 standard; DNA; 17 BP.
 XX
 AC ADB40322;
 XX
 DT 18-DEC-2003 (revised)
 DT 04-DEC-2003 (first entry)
 XX
 DE Tumour suppression/reversion associated nucleotide #645.
 XX
 KW diagnosis.
 XX
 OS Homo sapiens.
 XX
 FN WO2003040369-A2.
 XX
 PD 15-MAY-2003.
 XX
 PF 17-SEP-2002; 2002WO-IB004219.
 XX
 PR 17-SEP-2001; 2001FR-00011981.
 XX
 PA (MOLE-) MOLECULAR ENGINES LAB.
 XX
 PI Telerman A, Amson R, Tuijnder M;
 XX
 DR WPI; 2003-441574/41.
 XX
 PT New nucleic acid encoding human prostate membrane-specific antigen,
 PT useful e.g. for treatment of tumors and viral infection, also related
 PT polypeptide and antibodies.
 XX
 PS Disclosure; Page 107; 77lpp; French.
 XX
 CC The invention relates to the isolation of 6327 nucleotide sequences,
 CC fragments of at least 15 consecutive nucleotides of these nucleotides, a
 CC sequence having at least 80% identity, after optimal alignment, with the
 CC nucleotides, a sequence that hybridizes under stringent conditions with
 CC the nucleotides, or the complement, or corresponding RNA, of the
 CC nucleotides. The nucleotides are used as probes or primers for detecting,
 CC identifying, quantifying and/or amplifying nucleic acids, as in vitro
 CC sense and antisense sequences, of nucleotides involved in tumour
 CC suppression or reversion, apoptosis and or viral resistance, to produce
 CC recombinant polypeptides, and to prepare transgenic animals, as
 CC experimental models. The nucleotides (also vectors containing them and
 CC cells containing the vectors), the encoded polypeptides and antibodies
 CC (Ab) against the polypeptide are useful for prevention and/or treatment
 CC of viral infections or diseases characterized by development of tumours

CC cells containing the vectors), the encoded polypeptides and antibodies
 CC (Ab) against the polypeptide are useful for prevention and/or treatment
 CC of viral infections or diseases characterized by development of tumours
 CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
 CC Analysis of the expression of the nucleotides can be used for diagnosis
 CC and/or prognosis of these diseases. The nucleotides and polypeptides can
 CC also be used to screen for their specific interactive molecules,
 CC potentially useful for treating diseases associated with abnormal
 CC expression of the nucleotides.

XX
 SQ Sequence 17 BP; 2 A; 4 C; 3 G; 8 T; 0 U; 0 Other;
 Query Match 17.0%; Score 12.4; DB 1; Length 17;
 Best Local Similarity 92.9%; Pred. No. 5e+02; Indels 0; Gaps 0;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 903 GGCATTTTCTTTG 916
 DQ 1 GATCATTTCTTTG 14
 ||||| |||||

RESULT 111
 ADB40653/C
 ID ADB40653 standard; DNA; 17 BP.
 XX
 AC ADB40653;
 XX
 DT 18-DEC-2003 (revised)
 DT 04-DEC-2003 (first entry)
 XX
 DE Tumour suppression/reversion associated nucleotide #976.
 XX
 KW cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
 KW primer; probe; tumour suppression; tumour reversion; apoptosis;
 KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
 KW diagnosis.
 XX
 OS Homo sapiens.
 XX
 FN WO2003040369-A2.
 XX
 PD 15-MAY-2003.
 XX
 PF 17-SEP-2002; 2002WO-IB004219.
 XX
 PR 17-SEP-2001; 2001FR-00011981.
 XX
 PA (MOLE-) MOLECULAR ENGINES LAB.
 XX
 PI Telerman A, Amson R, Tuijnder M;
 XX
 DR WPI; 2003-441574/41.
 XX
 PT New nucleic acid encoding human prostate membrane-specific antigen,
 PT useful e.g. for treatment of tumors and viral infection, also related
 PT polypeptide and antibodies.
 XX
 PS Disclosure; Page 146; 77lpp; French.
 XX
 CC The invention relates to the isolation of 6327 nucleotide sequences,
 CC fragments of at least 15 consecutive nucleotides of these nucleotides, a
 CC sequence having at least 80% identity, after optimal alignment, with the
 CC nucleotides, a sequence that hybridizes under stringent conditions with
 CC the nucleotides, or the complement, or corresponding RNA, of the
 CC nucleotides. The nucleotides are used as probes or primers for detecting,
 CC identifying, quantifying and/or amplifying nucleic acids, as in vitro
 CC sense and antisense sequences, of nucleotides involved in tumour
 CC suppression or reversion, apoptosis and or viral resistance, to produce
 CC recombinant polypeptides, and to prepare transgenic animals, as
 CC experimental models. The nucleotides (also vectors containing them and
 CC cells containing the vectors), the encoded polypeptides and antibodies
 CC (Ab) against the polypeptide are useful for prevention and/or treatment
 CC of viral infections or diseases characterized by development of tumours

or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
Analysis of the expression of the nucleotides can be used for diagnosis
and/or prognosis of these diseases. The nucleotides and polypeptides can
also be used to screen for their specific interactive molecules,
potentially useful for treating diseases associated with abnormal
expression of the nucleotides.

Sequence 17 BP; 8 A; 3 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 17.0%; Score 12.4; DB 1; Length 17;

Best Local Similarity 92.9%; Pred. No. 5e+02; Mismatches 0; Indels 0; Gaps 0;
Matches 13; Conservative 0

904 GTCAATTTCTTTGG 917

17 GACATTTCTTTGG 4

RESULT 112

9B4348

ADB44348 standard; DNA; 17 BP.

ADB44348;

18-DEC-2003 (first entry)

Tumour suppression/reversion associated nucleotide #4671.

cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;

primer; probe; tumour suppression; tumour reversion; apoptosis;

virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
diagnosis.

Homo sapiens.

WO2003040369-A2.

15-MAY-2003.

17-SEP-2002; 2002WO-1B004219.

17-SEP-2001; 2001PR-00011981.

(MOLE-) MOLECULAR ENGINES LAB.

Telerman A, Amson R, Tuijnder M;

WPI; 2003-441574/41.

New nucleic acid encoding human prostate membrane-specific antigen,
useful e.g. for treatment of tumors and viral infection, also related
polypeptide and antibodies.

Disclosure; Page 578; 771pp; French.

The invention relates to the isolation of 6327 nucleotide sequences,
fragments of at least 15 consecutive nucleotides of these nucleotides, a
sequence having at least 80% identity after optimal alignment, with the
nucleotides, a sequence that hybridizes under stringent conditions with
the nucleotides, or the complement, or corresponding RNA, of the
nucleotides. The nucleotides are used as probes or primers for detecting,
identifying, quantifying and/or amplifying nucleic acids, as in vitro
sense and antisense sequences, of nucleotides involved in tumour
suppression or reversion, apoptosis and or viral resistance, to produce
recombinant polypeptides, and to prepare transgenic animals, as
experimental models. The nucleotides (also vectors containing them and
cells containing the vectors), the encoded polypeptides and antibodies
(Ab) against the polypeptide are useful for prevention and/or treatment
of viral infections or diseases characterized by development of tumours
or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
Analysis of the expression of the nucleotides can be used for diagnosis
and/or prognosis of these diseases. The nucleotides and polypeptides can
also be used to screen for their specific interactive molecules,

CC potentially useful for treating diseases associated with abnormal
expression of the nucleotides.

XX Sequence 17 BP; 1 A; 2 C; 4 G; 10 T; 0 U; 0 Other;
SQ

Query Match 17.0%; Score 12.4; DB 1; Length 17;

Best Local Similarity 92.9%; Pred. No. 5e+02;

Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 911 TCTTTGGTCTTTGC 924

3 TCTTTGGTCTTTGC 16

RESULT 113

AAT09038/c

ID AAT09038 standard; DNA; 18 BP.

XX AC AAT09038;

DT 28-AUG-1996 (first entry)

DE Arabidopsis thaliana EIN2 (ethylene insensitive) locus primer PE9.

XX EIN2; ethylene insensitive; transformed plant; disease tolerance;

XX ethylene insensitivity; primer; ss.

XX OS Synthetic.

XX PN WO9535318-A1.

XX PD 28-DEC-1995.

XX PF 15-JUN-1995; 95WO-US007744.

XX PR 17-JUN-1994; 94US-00261822.

XX PA (UYPE-) UNIV PENNSYLVANIA.

XX PI Ecker J, Rothenberg M, Lehman A, Roman G;

XX DR WPI; 1996-058366/06.

XX Plant sequences for ethylene insensitive loci and hook-less 1 allele(s) -
confer disease tolerance and ethylene insensitivity when transformed into
plants.

XX Example 2; Page 30; 144pp; English.

XX The present sequence is a primer for the A. thaliana EIN2 (ethylene
insensitive) locus. When transformed into plants EIN2 genomic DNA, or
cDNA sequences (obtd. from the EIN2 locus) confer disease tolerance and
ethylene insensitivity, with minimal injury or reduction in the harvest
yield of saleable material. The plants with disease tolerance may have
extensive levels of infection, but little necrosis and few or no lesions.
XX They may also have reduced necrotic and water soaking responses, and
chlorophyll loss may be virtually absent

XX Sequence 18 BP; 6 A; 4 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 17.0%; Score 12.4; DB 1; Length 18;

Best Local Similarity 92.9%; Pred. No. 5.2e+02;

Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 933 CCTCCTCTTCATTG 946

17 CCTCCTCTTCATTG 4

RESULT 114

AA01714/c

ID AAX01714 standard; DNA; 18 BP.

XX

AC AAX01714;
XX
XX 08-JUN-1999 (first entry)
XX
XX Human anti-angiogenic 16K hPRL DNA fragment #1.
XX
XX Human; anti-angiogenic; prolactin; placental lactogen; hPL; angiogenesis;
XX growth hormone; hGH; hGH-V; capillary endothelial cell proliferation;
XX placental vascularisation; pregnancy; treatment; angiogenic disease;
XX tumour; inhibitor; malignant; angiofibroma; arteriovenous malformation;
XX arthritis; atherosclerotic plaques; corneal graft neovascularisation;
XX wound healing; proliferative retinopathy; macular degeneration; trachoma;
XX granulation; glaucoma; ocular; uveitis; fracture; Osler-Weber syndrome;
XX psoriasis; fibroplasia; scleroderma; Kaposi's sarcoma; vascular adhesion;
XX ulcer; leukaemia; reproductive disorder; contraceptive agent;
XX gene therapy; pre-eclampsia; intrauterine growth retardation;
XX placental dysfunction; ss.
XX
XX Homo sapiens.
XX
XX WO9851323-A1.
XX
XX 19-NOV-1998.
XX
XX 12-MAY-1998; 98WO-US009691.
XX
XX 13-MAY-1997; 97US-0046394P.
XX
XX (REGC) UNIV CALIFORNIA.
XX
XX Weiner RI, Martial JA, Struman I, Taylor R;
XX
XX WPI; 1999-045192/04.
XX P-FSDB; AAW92268.
XX
XX New anti-angiogenic peptides - comprise N-terminal fragments of human
XX placental lactogen, human growth hormone, growth hormone variant or human
XX prolactin.
XX
XX Example 5; Page 55; 87pp; English.
XX
XX This invention describes novel human anti-angiogenic peptides derived
XX from 10 to 150 consecutive amino acids selected from the N-terminal end
XX of human placental lactogen (hPL), human growth hormone (hGH), growth
XX hormone variant (hGH-V), or human prolactin. Such peptides (i) inhibit
XX capillary endothelial cell proliferation and organisation (ii) inhibit
XX angiogenesis in chick chorioallantoic membrane and (iii) binds to at
XX least one specific receptor which does not bind an intact full length
XX hGH, hPL, prolactin or hGH-V. The invention also describes a method for
XX diagnosing a probable abnormality of placental vascularisation during
XX pregnancy. The peptides can be used for treating an angiogenic disease in
XX a subject, for inhibiting tumour formation or growth in a patient or for
XX modulating vascularisation of a patient's placenta. In particular, the
XX peptides can be used for preventing or treating e.g. malignant tumours,
XX angiofibroma, arteriovenous malformation, arthritic such as rheumatoid
XX arthritis, atherosclerotic plaques, corneal graft neovascularisation,
XX delayed wound healing, proliferative retinopathy such as diabetic
XX retinopathy, macular degeneration, granulations such as those occurring
XX in haemophilic joints, inappropriate vascularisation in wound healing
XX such as hypertrophic scars or keloid scars, neovascular glaucoma, ocular
XX tumour, uveitis, non-union fractures, Osler-Weber syndrome, psoriasis,
XX pyogenic glaucoma, retrolental fibroplasia, scleroderma, solid tumours,
XX Kaposi's sarcoma, trachoma, vascular adhesions, chronic varicose ulcers,
XX leukaemia, and reproductive disorders such as follicular and luteal cysts
XX and choriocarcinoma. They can also be used as contraceptive agents. DNA
XX encoding the peptides can be used in gene therapy. The measurement of
XX abnormal levels of N-terminal fragments of hGH, hGH-V, prolactin or hPL
XX can be used in assays for impairment of vascular development associated
XX with pre-eclampsia, intrauterine growth retardation, and placental
XX dysfunction
XX
XX Sequence 18 BP; 10 A; 4 C; 2 G; 2 T; 0 U; 0 Other;

Query Match 17.0%; Score 12.4; DB 1; Length 18;
Best Local Similarity 92.9%; Pred. No. 5.2e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 907 ATTTCTTTGGTCT 920
Db 18 ATTTCTTTGGTTT 5
|||||
RESULT 115
ABL41558/c
ID ABL41558 standard; DNA; 18 BP.
XX
XX ABL41558;
XX
XX 23-MAY-2002 (first entry)
XX
XX Primer #3 related to fusion gene of trehalose synthase.
XX
XX Fusion gene; trehalose synthase; ss; PCR primer.
XX
XX Brevibacterium helvolum.
XX
XX KR2001010091-A.
XX
XX 05-FEB-2001.
XX
XX 15-JUL-1999; 99KR-00028783.
XX
XX 15-JUL-1999; 99KR-00028783.
XX
XX (CHOL/) CHOI Y D.
XX (KIMC/) KIM C H.
XX
XX Choi YD, Kim CH, Kim G, Kim JG, Kim YH, Lee JS, Lim JY;
XX Park SS, Seo HS;
XX WPI; 2001-481666/52.
XX
XX New fusion gene of trehalose synthase, fusion enzyme protein and method
XX for producing trehalose using the same.
XX
XX Disclosure; Page 22; 25pp; Korean.
XX
XX This invention relates to a fusion gene of trehalose synthase, fusion
XX enzyme protein and a method for producing trehalose using the same. The
XX trehalose is effectively produced in higher yield using a fusion gene of
XX BvMTase and BvMTHase gene that code trehalose biosynthase. The present
XX sequence represents a primer related to the fusion gene of trehalose
XX synthase
XX
XX Sequence 18 BP; 7 A; 3 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 17.0%; Score 12.4; DB 1; Length 18;
Best Local Similarity 92.9%; Pred. No. 5.2e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 916 GGTCTTTGCCCTTT 929
Db 15 GGTCTTTGCCCTTT 2
|||||
RESULT 116
ABL41557
ID ABL41557 standard; DNA; 18 BP.
XX
XX ABL41557;
XX
XX 23-MAY-2002 (first entry)
XX
XX Primer #2 related to fusion gene of trehalose synthase.
XX
XX Fusion gene; trehalose synthase; ss; PCR primer.

```

XX Brevibacterium helvolum.
PT KR2001010091-A.
PT
XX 05-FEB-2001.
XX
XX 15-JUL-1999; 99KR-00028783.
XX
XX 15-JUL-1999; 99KR-00028783.
XX
XX (CHOI/) CHOI Y D.
XX (KIMC/) KIM C H.
XX
XX Choi YD, Kim CH, Kim G, Kim JG, Kim YH, Lee JS, Lim JY;
XX Park SS, Seo HS;
XX WPI; 2001-481666/52.
XX
XX New fusion gene of trehalose synthase, fusion enzyme protein and method
XX for producing trehalose using the same.
XX
XX Disclosure; Page 22; 25pp; Korean.
XX
XX This invention relates to a fusion gene of trehalose synthase, fusion
XX enzyme protein and a method for producing trehalose using the same. The
XX trehalose is effectively produced in higher yield using a fusion gene of
XX BvMSase and BvWthase gene that code trehalose biosynthase. The present
XX sequence represents a primer related to the fusion gene of trehalose
XX synthase
XX
XX Sequence 18 BP; 3 A; 5 C; 3 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 17.0%; Score 12.4; DB 1; Length 18;
XX Best Local Similarity 92.9%; Pred. No. 5.2e+02;
XX Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 916 GGTCTTTGCTTTT 929
XX |||||
XX 4 GGTCTTTGCTTTT 17
XX
XX RESULT 117
XX AS16281
XX AAS16281 standard; DNA; 18 BP.
XX
XX AAS16281;
XX
XX 14-FEB-2002 (first entry)
XX
XX Mouse LiCAM cytoplasmic RT-PCR primer #2.
XX
XX Neurite outgrowth; fibronectin Type III repeat; cell adhesion molecule;
XX F80; Fn3-5; neurone; peripheral nerve damage; trauma; infarction;
XX degenerative disease; malignant disease; antibacterial;
XX central nervous system lesion; viricide; antiparkinsonian; nootropic;
XX neuroprotective; antiinflammatory; mouse; LiCAM; RT-PCR primer; ss.
XX
XX Mus sp.
XX
XX US6313265-B1.
XX
XX 06-NOV-2001.
XX
XX 24-JUL-1995; 95US-00506296.
XX
XX 24-JUL-1995; 95US-00506296.
XX
XX (SCRI ) SCRIPPS RES INST.
XX
XX Phillips G, Cunningham BA, Crossin KL;
XX
XX WPI; 2002-017011/02.

```

```

XX Polypeptide for promoting neurite out-growth useful for treating diseases
XX such as inflammation, Parkinson's disease, trauma, comprises fibronectin
XX type III repeats derived from a family of cell adhesion molecules.
XX
XX Example 1; Col 29; 132pp; English.
XX
XX The present invention relates to polypeptides that promote neurite
XX growth. The polypeptides contain fibronectin Type III repeats derived
XX from a family of cell adhesion molecules (CAMs). The polypeptides of the
XX invention include the F80, Fn3-5, and Fn4-5 regions of the CAM family
XX members chicken Ng-CAM, chicken Nr-CAM, mouse LiCAM and human LiCAM. The
XX polypeptides of the invention are useful for promoting neurite outgrowth
XX of neuronal cells in vitro e.g. in a cell culture system, or in vivo for
XX treating disorders such as peripheral nerve damage associated with
XX physical or surgical trauma, infarction, bacterial or viral infections,
XX toxin exposure, degenerative disease, malignant disease that affects
XX peripheral or central neurones, or in surgical or transplantation methods
XX in which new neuronal cells from brain, spinal cord or dorsal root
XX ganglia are introduced and require stimulation of neurite outgrowth from
XX the implant and innervation into the recipient tissue, where the diseases
XX include central nervous systems lesions, gliosis, Parkinson's disease,
XX Alzheimer's disease, gliotic response or inflammation. The present
XX sequence for mouse LiCAM cytoplasmic reverse transcriptase (RT)-PCR
XX primer #2 is used with RT-PCR primer #1 (AAS16280) to amplify a probe for
XX the cloning of human LiCAM cDNA
XX
XX Sequence 18 BP; 2 A; 7 C; 1 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 17.0%; Score 12.4; DB 1; Length 18;
XX Best Local Similarity 92.9%; Pred. No. 5.2e+02;
XX Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 933 CCTCTCTTCATTG 946
XX Db 1 CCTCTCTTCATTG 14
XX
XX RESULT 118
XX AAQ20515
XX ID AAQ20515 standard; DNA; 19 BP.
XX
XX AAQ20515;
XX
XX 25-MAR-2003 (revised)
XX 20-MAR-1992 (first entry)
XX
XX H-ras ribozyme probe H-ras-Rb-5.
XX
XX Hras; oncogene; bladder carcinoma; neoplasm; probe; PCR.
XX
XX Synthetic.
XX
XX MO9118625-A.
XX
XX 12-DEC-1991.
XX
XX 07-JUN-1990; 90WO-US003218.
XX
XX 07-JUN-1990; 90WO-US003218.
XX 01-NOV-1990; 90WO-US006226.
XX 19-DEC-1990; 90WO-US007459.
XX
XX (CITY ) CITY OF HOPE.
XX
XX Scanlon KJ;
XX
XX WPI; 1992-007207/01.
XX
XX New ribozyme and plasmid - for cleavage of the Hras oncogene for
XX treatment of neoplasms including bladder cancer.
XX
XX Disclosure; Page 7; 25pp; English.

```

XX CC Ras ribozyme expression plasmids were introduced into EJ cells. G418-
 CC resistant stable clones were screened for integration of the ras ribozyme
 CC plasmid by PCR analysis of their DNA. This radiolabelled probe was
 CC hybridised to the PCR prod. from 100 ng of EJ RNA, EJ pfbeta RNA and
 CC EjpHbetaHras ribozyme clones. See also AAQ20196, AAQ20515-16 and
 CC WO9118913 (AAQ20518-21) and WO9118624. (Updated on 25-MAR-2003 to correct
 CC PR field.)
 XX SQ Sequence 19 BP; 3 A; 4 C; 4 G; 8 T; 0 U; 0 Other;
 Query Match 17.0%; Score 12.4; DB 1; Length 19;
 Best Local Similarity 92.9%; Pred. No. 5.4e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 917 GTCCTTGCCTTTTA 930
 Db 6 GTGTTTGCCTTTTA 19
 RESULT 119
 AAZ72894/c
 ID AAZ72894 standard; DNA; 19 BP.
 AC
 AZ72894;
 DT 10-SEP-2001 (first entry)
 DE Human biallelic marker upstream amplification primer SEQ ID NO:7250.
 XX Human genome; biallelic marker; high density disequilibrium map;
 KW genomic map; haplotype; phenotype; polymorphic base; genotyping;
 KW haplotyping; hybridisation; identification; characterisation;
 KW amplification; single nucleotide polymorphism; SNP; PCR primer;
 KW diagnosis; ss.
 XX Homo sapiens.
 CS
 XX WO9954500-A2.
 PV
 XX 28-OCT-1999.
 PJ
 XX 21-APR-1999; 99WO-IB000822.
 PF
 XX 21-APR-1998; 98US-0082614P.
 PR 23-NOV-1998; 98US-0109732P.
 XX (G8ST) GENSET.
 FA
 XX Cohen D, Blumenfeld M, Chumakov I;
 PI
 XX WPI; 2000-013267/01.
 DR
 XX Novel biallelic markers used to construct a high density disequilibrium
 PT map of the human genome.
 PT
 XX Claim 9; Page 1776; 2745pp; English.
 PS
 XX AAZ65654 to AAZ69578 represent human biallelic markers from the present
 CC invention, which contain a polymorphic base at position 24 of their
 CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
 CC primers for the biallelic markers. The biallelic markers of the invention
 CC have a variety of uses: they can be used for high density mapping of the
 CC human genome, and in complex association studies and haplotyping studies
 CC which are useful in determining the genetic basis for disease states.
 CC Compositions and methods of the invention can also be useful for the
 CC identification of the targets for the development of pharmaceutical
 CC agents and diagnostic methods, as well as the characterisation of the
 CC differential efficacious responses to and side effects from
 CC pharmaceutical agents acting on a disease as well as other treatment.
 CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
 CC 3367, are not actually given a sequence in the Sequence Listing from the
 CC present invention

XX SQ Sequence 19 BP; 9 A; 2 C; 5 G; 3 T; 0 U; 0 Other;
 Query Match 17.0%; Score 12.4; DB 1; Length 19;
 Best Local Similarity 92.9%; Pred. No. 5.4e+02;
 Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 917 GTCCTTGCCTTTTA 930
 Db 19 GTCCTTGCCTTTTA 6
 RESULT 120
 AAQ11387/c
 ID AAQ11387 standard; DNA; 17 BP.
 AC
 AAQ11387;
 XX 25-MAR-2003 (revised)
 DT 02-JUL-1991 (first entry)
 DE Probe COD 931 specific for T. hyo 39kD antigen gene 2.
 XX Swine dysentery; vaccine.
 KW
 XX Synthetic.
 OS
 XX WO9104036-A.
 FN
 XX 04-APR-1991.
 PD
 XX 13-SEP-1989; 89US-00406535.
 PF
 XX 13-SEP-1989; 89US-00406535.
 PR
 XX (MLTE-) ML TECHN VENTURES.
 PA
 XX Gabe J, Dragon E, Mccaman M;
 PI
 XX WPI; 1991-117317/16.
 DR
 XX Treponema hyodysenteriae antigens - having molecular wt. of 39 K daltons
 PT and their DNA codes, and use for preparing vaccine.
 PT
 XX Disclosure; Page 38; 84pp; English.
 PS
 XX The probe was designed from the sequence of the pTrep330 encoding the T.
 CC hyo 39 kD antigen no. 2. It was used for screening of clones prepd. from
 CC T. hyo genomic DNA following PCR treatment. See also AAQ11377-Q11409.
 CC (Updated on 25-MAR-2003 to correct PA field.)
 CC
 XX SQ Sequence 17 BP; 8 A; 1 C; 4 G; 4 T; 0 U; 0 Other;
 Query Match 16.7%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 5.4e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 928 TTATCCCTCTCTTCAT 944
 Db 17 TTATCCGTCATATTCAT 1
 RESULT 121
 AAQ21838
 ID AAQ21838 standard; DNA; 17 BP.
 XX
 AC AAQ21838;
 XX 25-JUN-1992 (first entry)
 DT
 XX Antisense polyamine-conjugated oligonucleotide to papilloma virus.
 DE
 XX Antisense translation sequence; antisense therapy; phosphorothioate;
 KW

```

/ nuclease resistance; ss.
/ Synthetic.
/ Key modified_base 1 Location/Qualifiers
/   /tag= a
/   /mod_base= OTHER
/   /note= "5'-deoxy-5'-(diphenylimidazolin-2-yl) thymidine"
/ WO9202531-A.
/ 20-FEB-1992.
/ 27-JUL-1990; 90US-00558663.
/ 27-JUL-1990; 90US-00558663.
/ (ISIS-) ISIS PHARMA INC.
/ Cook PD, Guinasso CJ;
/ WPI; 1992-080013/10.
/ New poly-amine conjugated oligo-nucleotide analogues - target TAT region
/ of HIV and portions of Herpes and papilloma genome(s).
/ Example 3; Page 17; 26pp; English.
/ A phosphorothioate oligonucleotide able to hybridise to Papilloma virus
/ initiation of translation sequence was synthesised. The 5' thymidine
/ derivative was conjugated with a polyamine, pref. tris(aminobutyl)amine.
/ The resulting oligonucleotide analogue has enhanced cellular uptake and
/ is less susceptible to nuclease activity than standard oligonucleotides.
/ It can be used in anti-sense therapy. See AAQ21836-Q21842
/ Sequence 17 BP; 2 A; 8 C; 0 G; 7 T; 0 U; 0 Other;
/
/ Query Match 16.7%; Score 12.2; DB 1; Length 17;
/ Best Local Similarity 82.4%; Pred. No. 5.4e+02;
/ Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
/
/ 929 TATCCCTCCTCTTCATT 945
/   |||||
/   1 TCTCCATCCTCTTCACT 17
/
/ RESULT 122
/ AQ57302
/   AAQ57302 standard; mRNA; 17 BP.
/   AAQ57302;
/   25-MAR-2003 (revised)
/   26-JUL-1994 (first entry)
/   Enzymatic RNA molecule c-myb mRNA target sequence.
/   Specific; cleavage; target RNA; protein; prophylaxis; expression;
/   inhibitor; inhibition; ribozyme; treatment; prevention; psoriasis;
/   asthma; inflammatory diseases; restenosis; cardiovascular condition;
/   hypertension; arthritis; ss.
/   Synthetic.
/   WO9402595-A1.
/   03-FEB-1994.
/   02-JUL-1993; 93WO-US006316.
/   17-JUL-1992; 92US-00916763.
/   07-DEC-1992; 92US-00987132.

```

```

PR 07-DEC-1992; 92US-00989848.
PR 07-DEC-1992; 92US-00989849.
PR 19-JAN-1993; 93US-00008895.
XX (RIBO-) RIBOZYME PHARM INC.
XX Sullivan SM, Draper KG;
XX WPI; 1994-048853/06.
XX Enzymatic RNA molecules which cleave mRNA - used to treat or prevent
XX inflammatory, arthritic, stenotic or cardiovascular diseases or
XX conditions.
XX Claim 3; Page 20; 65pp; English.
XX This is a c-myb mRNA target sequence (nucleotide no. 2695) of an
XX enzymatic RNA molecule (ribozyme) which cleaves mRNA associated with the
XX development or maintenance of a restenotic condition. The concn. of the
XX ribozyme necessary to effect a therapeutic treatment is lower than that
XX of an antisense oligonucleotide and the specificity of action is higher.
XX (Updated on 25-MAR-2003 to correct PN field.)
XX Sequence 17 BP; 2 A; 4 C; 4 G; 7 T; 0 U; 0 Other;
XX
/ Query Match 16.7%; Score 12.2; DB 1; Length 17;
/ Best Local Similarity 82.4%; Pred. No. 5.4e+02;
/ Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
/
/ QY 910 TTCCTTGGCTTTGGCT 926
/   |||||
/   1 TGCATGCTCTTAGCCT 17
/ Db
/
/ RESULT 123
/ AAT01734
/ ID AAT01734 standard; DNA; 17 BP.
/ AC AAT01734;
/ XX 17-DEC-1995 (first entry)
/ DT
/ DE Peptide nucleic acid targetting HPV genome.
/ XX
/ XX peptide nucleic acid; PNA; cytomegalovirus; CMV; papillomavirus;
/ KW antiviral; diagnostic; ss.
/ XX Synthetic.
/ XX
/ Key Location/Qualifiers
/ FT misc_feature 1..17
/ FT /tag= a
/ FT /note= "at least one (and preferably all) of the backbone
/ FT oligomer consists of amide units, so that the
/ FT oligomer consists of the nucleobases attached covalently
/ FT to a polyamide backbone"
/ XX
/ XX WO9504748-A1.
/ XX
/ XX 16-FEB-1995.
/ PD
/ XX 09-AUG-1994; 94WO-US009039.
/ PF
/ XX 09-AUG-1993; 93US-00104438.
/ PR
/ XX (ISIS-) ISIS PHARM INC.
/ PA
/ XX Anderson KE, Crooke ST, Mirabelli CK, Ecker DJ, Cowsett LM;
/ PI WPI; 1995-090841/12.
/ XX
/ DR
/ XX New peptide nucleic acid oligomers hybridisable to cytomegalovirus or
/ PT papilloma:virus - are stable anti-sense molecules with high affinity for

```

single stranded DNA, used for treating infections.

Claim 10; Page 52; 65pp; English.

New oligomers are claimed which (A) have at least one peptide nucleic acid (PNA) subunit and (B) have a sequence hybridizable to AUG region, 5' untranslated region, intron/exon (I/E) junction or coding sequence of cytomegalovirus gene selected from DNA polymerase, IE1 and IE2, or hybridizable to the E, E2, E4, E5, E6, E7, I1 or I2 reading frames of a papillomavirus. The PNAs can be used to target RNA and single stranded DNA (ssDNA) to produce antisense-type gene regulation moieties. Hence they may be used therapeutically for modulating cytomegalovirus and papillomavirus processes and also as diagnostics (e.g., as probes for specific mRNAs). PNA oligomers have high affinity for complementary single stranded DNA. They are also able to form triple helices in which a first PNA strand binds with RNA or ssDNA and a second PNA strand binds with the resulting double helix or with the first PNA strand. The PNAs possess no significant charge and are water soluble, which facilitates cellular uptake. Further, since they contain amides of non-biological amino acids, they are biostable and resistant to enzymatic degradation by proteases. The present sequence targets a portion of the papillomavirus genome

Sequence 17 BP; 2 A; 8 C; 0 G; 7 T; 0 U; 0 Other;

Query Match 16.7%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 5.4e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Cy 929 TATCCCTCCTCTCATT 945
 ||||| ||||| |||||
 Db 1 TCTCCATCCTCTCTACT 17

RESULT 124
 AAI18977
 ID AAI18977 standard; RNA; 17 BP.
 AC AAI18977;
 XX
 XX
 XX 19-JUN-2000 (first entry)
 DE Human TIE-2 substrate sequence SEQ ID NO:2203.
 KW Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
 KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
 KW hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;
 KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
 KW dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
 KW age related macular degeneration; inflammation; neovascular glaucoma;
 KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
 KW tuberosus sclerosis; pot-wine stain; Sturge Weber syndrome;
 KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
 XX Homo sapiens.
 CS
 OS
 XX WO9950403-A2.
 XX
 XX 07-OCT-1999.
 XX
 XX 24-MAR-1999; 99WO-US006507.
 XX
 XX 27-MAR-1998; 98US-0079678P.
 XX
 XX (RIBO-) RIBOZYME PHARM INC.
 XX
 XX Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;
 XX WPI; 1999-591315/50.
 XX
 XX Novel ribozymes for modulating the synthesis, expression and/or stability
 XX of an mRNA encoding an angiogenic factors.

Claim 56; Page 129; 305pp; English.

The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity, which specifically cleave RNA encoded by an aryl hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3 gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAI16775 to AAI17167 and AAI17561 to AAI17622 represent ribozyme sequences for ARNT, and AAI17168 to AAI17560 and AAI17623 to AAI17684 represent their corresponding target sequences; AAI17685 to AAI18385 and AAI19087 to AAI19154 represent ribozyme sequences for Tie-2, and AAI18386 to AAI19086 and AAI19155 to AAI19222 represent their corresponding target sequences; AAI19223 to AAI20361 and AAI21501 to AAI21595 represent ribozyme sequences for integrin alpha 6 subunit, and AAI20362 to AAI21500 and AAI21596 to AAI21688 represent their corresponding target sequences; AAI21689 to AAI22475 and AAI23263 to AAI23342 represent ribozyme sequence for integrin subunit beta 3, and AAI22476 to AAI23262, AAI23343 to AAI23422 represent their corresponding target sequences. The ribozymes of the invention are used for modulating the synthesis, expression and/or stability of an mRNA encoding angiogenic factor, especially ARNT, or integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are especially used to treat cancer, diabetic retinopathy, age related macular degeneration (ARMD), inflammation, and arthritis, as well as neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris, angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome, and other syndromes and diseases related to the levels of ARNT, Tie-2, and integrin subunit alpha-6, or integrin subunit beta-3

Sequence 17 BP; 3 A; 7 C; 0 G; 0 T; 7 U; 0 Other;

Query Match 16.7%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 41.2%; Pred. No. 5.4e+02;
 Matches 7; Conservative 7; Mismatches 3; Indels 0; Gaps 0;

Qy 924 CCTTTATCCCTCCTCT 940
 |:::|:::|:::|:::|
 Db 1 CAUUUUUCCUCACCU 17

RESULT 125
 AAV93545
 ID AAV93545 standard; RNA; 17 BP.
 AC AAV93545;
 XX
 XX 18-FEB-1999 (first entry)
 DE Human B-raf substrate nucleotide position 1605.
 XX
 XX Human; c-raf; A-raf; B-raf; hammerhead ribozyme; hairpin ribozyme;
 KW target; substrate; catalyst; modulation; expression; Raf gene; delivery;
 KW screening; identification; synthesis; deprotection; purification; cancer;
 KW inflammation; psoriasis; non-hepatic ascites; infection; genetic drift;
 KW restenosis; rheumatoid arthritis; ss.
 XX
 XX Homo sapiens.
 OS
 XX WO9850530-A2.
 XX
 XX 12-NOV-1998.
 XX
 XX 05-MAY-1998; 98WO-US009249.
 XX
 XX 09-MAY-1997; 97US-0046059P.
 XX 09-JUN-1997; 97US-0049002P.
 XX 03-JUL-1997; 97US-0051718P.
 XX 22-AUG-1997; 97US-0056808P.
 XX 02-OCT-1997; 97US-0061321P.
 XX 02-OCT-1997; 97US-0061324P.
 XX 05-NOV-1997; 97US-0064866P.
 XX 19-DEC-1997; 97US-0068212P.
 XX (RIBO-) RIBOZYME PHARM INC.
 PA

Jarvis T, Matulic-Adamic J, Reynolds M, Kisich K, Bellon L;
 Parry T, Beigelman L, Mcswiggen JA, Karpeisky A, Burgin A;
 Thompson J, Workman CT, Beaudry A, Sweedler D;
 WPI; 1999-009494/01.
 Identifying new catalytic nucleic acid that modulates selected processes
 - especially ribozymes that cleave Raf RNA for treating cancer,
 restenosis, and also new ribozymes and modified nucleoside triphosphates
 used as antiviral agents and synthons.
 Claim 177; Page 169; 259pp; English.
 A method has been developed for the identification of a nucleic acid
 capable of modulating a process in a biological system. The method
 comprises: (a) introducing into the system a random library of nucleic
 acid catalysts (NAC) having a substrate binding domain (SBD), comprising
 a random sequence, and a catalytic domain (CD); and (b) identifying NAC
 in systems where modulation has occurred and/or determining the sequence
 of at least part of the SBDs in such systems. Nucleic acid molecules with
 endonuclease activity and catalytic activity, from the present invention,
 are used to modulate gene expression in plant and mammalian cells and to
 cleave target nucleic acid, particularly for treating systemic diseases
 caused by specific RNA, e.g. cancer, inflammation, psoriasis, non-hepatic
 ascites and infection. They may also be used to detect genetic drift and
 mutations in diseased cells and to determine c-raf RNA. Specifically NACs
 with RNA-cleaving activity that modulate expression of the Raf gene, are
 used to treat cancer, restenosis, psoriasis or rheumatoid arthritis, or
 generally any condition associated with the level of c-raf. Introduction
 of sugar/phosphate modifications increases stability against nuclease and
 activity. AAV90922 to AAV93877 represent NACs that can be used in the
 method, specifically for modulating the expression of a Raf gene
 Sequence 17 BP; 2 A; 6 C; 3 G; 0 T; 6 U; 0 Other;
 Query Match 16.7%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 47.1%; Pred. No. 5.4e+02;
 Matches 8; Conservative 6; Mismatches 3; Indels 0; Gaps 0;
 / 933 CCTCTCTTCATGTTGTT 949
 1 CCTACUCUUCAGGGCU 17
 35ULT 126
 AAA36202/C
 AAA36202 standard; DNA; 17 BP.
 AAA36202;
 26-JUL-2000 (first entry)
 Human genomic SNP allele specific oligonucleotide SEQ ID NO:259.
 Human; single nucleotide polymorphism; SNP; genotyping; DNA analysis;
 allele specific oligonucleotide; ASO; reduced complexity genome; RCG;
 genomic classification; identification; DNA fingerprinting;
 tumour characterisation; hybridisation; ss.
 Homo sapiens.
 WO200018960-A2.
 06-APR-2000.
 24-SEP-1999; 99WO-US022283.
 25-SEP-1998; 98US-0101757P.
 (MASI) MASSACHUSETTS INST TECHNOLOGY.
 Landers JE, Jordan B, Housman DE, Charest A;

XX WPI; 2000-293181/25.
 DR Detection of single nucleotide polymorphisms in genomes by preparation
 PT and analysis of reduced complexity genomes, useful for genotyping,
 PT fingerprinting and determining allele frequency of SNPs.
 XX Disclosure; Page 61; 111pp; English.
 XX A method has been developed for detecting the presence or absence of a
 CC single nucleotide polymorphism (SNP) allele in a genomic sample. The
 CC method comprises preparing a reduced complexity genome (RCG) from the
 CC genomic sample and analysing the RCG for the presence or absence of a SNP
 CC allele. The method can be used to characterise a tumour, to generate a
 CC genomic pattern for an individual genome or to generate a genomic
 CC classification code for a genome. The method can be used to assess
 CC whether a subject is at risk for developing a disease or to identify a
 CC set of SNP alleles associated with a disease. The method can also be used
 CC to perform linkage analysis. AAA35944 to AAA35947 represent sequences
 CC used in the exemplification of the present invention. AAA35948 to
 CC AAA36632 represent nucleotide sequences containing SNPs
 XX Sequence 17 BP; 8 A; 3 C; 4 G; 2 T; 0 U; 0 Other;
 SQ Query Match 16.7%; Score 12.2; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 5.4e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 936 CCTCTCTTCATGTTGTTAA 952
 DB 17 CCTCTCTTCATGTTGTTGA 1
 RESULT 127
 ABR56419
 ID ABR56419 standard; RNA; 17 BP.
 XX
 AC ABR56419;
 XX
 DT 02-JUL-2002 (first entry)
 XX
 DE Human CLCAL gene enzymatic nucleic acid #790.
 XX
 KW Human; chloride channel calcium activated 1; CLCAL; ss; antiasthmatic;
 KW antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;
 KW chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;
 KW oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;
 KW acetylcysteine.
 XX
 OS Homo sapiens.
 XX
 PN WO200211674-A2.
 XX
 PD 14-FEB-2002.
 XX
 PF 09-AUG-2001; 2001WO-US024970.
 XX
 PR 09-AUG-2000; 2000US-0224383P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 PA (SYNT) SYNTEX USA LLC.
 PA (THOM/) THOMPSON J.
 XX
 PI Thompson J, Mcswiggen J, McKenzie T, Ayers D, Szymkowski DE;
 PI Grupe A;
 XX
 XX WPI; 2002-217145/27.
 XX Enzymatic polynucleotide that down regulates expression of chloride
 PT channel calcium activated gene, useful for treating Chronic obstructive
 PT pulmonary disease (COPD), chronic bronchitis and asthma.
 XX Claim 4; Page 70; 152pp; English.


```

WPI; 2003-229207/22.
Novel compound useful for treating cirrhosis, liver failure,
hepatocellular carcinoma, or condition associated with hepatitis C virus
infection.
Claim 1; Page 278; 387pp; English.
The present invention relates to nucleic acid molecules which modulate
the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
are nucleic acid decoy molecules and aptamers that bind to HBV reverse
transcriptase and/or HBV reverse transcriptase primer sequences, as well
as oligonucleotides that specifically bind the Enhancer I region of HBV
DNA. The nucleic acids may be used to modulate the expression of HBV
genes and HBV viral replication. Also disclosed is a method for screening
compounds and/or potential therapies directed against HBV, and compounds
that modulate the expression and/or replication of HCV. The compounds and
methods of the invention are useful for the treatment of degenerative and
disease states related to HBV and HCV infection, replication and gene
expression such as cirrhosis, liver failure, and hepatocellular
carcinoma. The present sequence represents a substrate for one of the HCV
DNAzyme or minus strand DNAzyme sequences disclosed in the present
invention
Sequence 17 BP; 7 A; 5 C; 4 G; 0 T; 1 U; 0 Other;
Query Match 16.7%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.4e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
/ 900 CCTGTCATTTCTTTG 916
) ||||| |||||
17 CCTGTCGTTATCTGTG 1
RESULT 130
JB43899
) ADB43899 standard; DNA; 17 BP.
) ADB43899;
) 18-DEC-2003 (revised)
) 04-DEC-2003 (first entry)
) Tumour suppression/reversion associated nucleotide #4222.
) cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
) primer; probe; tumour suppression; tumour reversion; apoptosis;
) virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
) diagnosis.
) Homo sapiens.
) WO2003040369-A2.
) 15-MAY-2003.
) 17-SEP-2002; 2002WO-IB004219.
) 17-SEP-2001; 2001FR-00011981.
) (MOLE-) MOLECULAR ENGINES LAB.
) Telerman A, Amson R, Tuijnder M;
) WPI; 2003-441574/41.
) New nucleic acid encoding human prostate membrane-specific antigen,
) useful e.g. for treatment of tumors and viral infection, also related

```

```

PT polypeptide and antibodies.
XX
XX Disclosure; Page 525; 771pp; French.
XX
CC The invention relates to the isolation of 6327 nucleotide sequences,
CC fragments of at least 15 consecutive nucleotides of these nucleotides, a
CC sequence having at least 80% identity, after optimal alignment, with the
CC nucleotides, a sequence that hybridizes under stringent conditions with
CC the nucleotides, or the complement, or corresponding RNA, of the
CC nucleotides. The nucleotides are used as probes or primers for detecting,
CC identifying, quantifying and/or amplifying nucleic acids, as in vitro
CC sense and antisense sequences, of nucleotides involved in tumour
CC suppression or reversion, apoptosis and or viral resistance, to produce
CC recombinant polypeptides, and to prepare transgenic animals, as
CC experimental models. The nucleotides (also vectors containing them and
CC cells containing the vectors), the encoded polypeptides and antibodies
CC (Ab) against the polypeptide are useful for prevention and/or treatment
CC of viral infections or diseases characterized by development of tumours
CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
CC Analysis of the expression of the nucleotides can be used for diagnosis
CC and/or prognosis of these diseases. The nucleotides and polypeptides can
CC also be used to screen for their specific interactive molecules,
CC potentially useful for treating diseases associated with abnormal
CC expression of the nucleotides.
XX
XX Sequence 17 BP; 3 A; 3 C; 4 G; 7 T; 0 U; 0 Other;
SQ
Query Match 16.7%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.4e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 903 GGTCAATTTCTTTGGTC 919
Db 1 GATCAATTTCTTTGGAC 17
RESULT 131
ADC04003
ID ADC04003 standard; DNA; 17 BP.
XX
XX ADC04003;
XX
XX 18-DEC-2003 (first entry)
XX
XX Human Na/H exchanger-like protein 1 gene oligonucleotide #450.
XX ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein;
XX NHELP1; passive replacement therapy; vaccine; diagnosis.
XX
XX Homo sapiens.
XX
XX EP1273650-A2.
XX
XX 08-JAN-2003.
XX
XX 25-JAN-2002; 2002EP-00001160.
XX
XX 30-JAN-2001; 2001WO-US000666.
XX
XX 23-MAY-2001; 2001US-00864761.
XX
XX 21-DEC-2001; 2001US-0343331P.
XX
XX (AEOM-) AEOMICA INC.
XX
XX Gu Y;
XX
XX WPI; 2003-302724/30.
XX
XX New human sodium-hydrogen exchanger like protein 1 (NHELP1), useful as a
XX passive replacement therapy or as a vaccine for treating or preventing
XX disorders associated with aberrant expression or activity of human
XX NHELP1.
XX
XX Example 2; SEQ ID NO 490; 468pp; English.

```


XX The invention relates to a nucleic acid molecule which encodes a Na+/H+
CC exchanger like protein (NHELP1). The NHELP1 nucleic acid molecule, NHELP1
CC polypeptide, an antibody against the protein or its antigen-binding
CC fragment is useful in therapy. The NHELP1 nucleic acid molecule, NHELP1
CC polypeptide and an agonist are particularly useful for manufacturing a
CC medicament for treating or preventing a disorder associated with
CC decreased expression or activity of human NHELP1. The antibody or its
CC antigen-binding fragment, and an antagonist, are useful for manufacturing
CC a medicament for treating or preventing a disorder associated with
CC increased expression or activity of human NHELP1. The NHELP1 nucleic acid
CC or protein is useful as passive replacement therapy, as a vaccine, or in
CC diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide
CC spanning the sequence of the human NHELP1 gene (ADC03514).
XX
SQ Sequence 17 BP; 3 A; 3 C; 2 G; 9 T; 0 U; 0 Other;

Query Match 16.7%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.4e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 938 TCTTCATGTTTAAATG 954
||| ||| ||| ||| |||
Db 1 TCTTCATGTTTAACTG 17

RESULT 132
ADC04000
ID ADC04000 standard; DNA; 17 BP.
XX
AC ADC04000;
XX
DT 18-DEC-2003 (first entry)
XX
DE Human Na/H exchanger-like protein 1 gene oligonucleotide #447.
XX
KW ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein;
KW NHELP1; passive replacement therapy; vaccine; diagnosis.
XX
OS Homo sapiens.
XX
FN EP1273660-A2.
XX
PD 08-JAN-2003.
XX
PF 25-JAN-2002; 2002EP-00001160.
XX
PR 30-JAN-2001; 2001WO-US000666.
PR 23-MAY-2001; 2001US-00864761.
PR 21-DEC-2001; 2001US-0343331P.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Gu Y;
XX
DR WPI; 2003-302724/30.
XX
PT New human sodium-hydrogen exchanger like protein 1 (NHELP1), useful as a
PT passive replacement therapy or as a vaccine for treating or preventing
PT disorders associated with aberrant expression or activity of human
PT NHELP1.
XX
PS Example 2; SEQ ID NO 487; 468pp; English.
XX
CC The invention relates to a nucleic acid molecule which encodes a Na+/H+
CC exchanger like protein (NHELP1). The NHELP1 nucleic acid molecule, NHELP1
CC polypeptide, an antibody against the protein or its antigen-binding
CC fragment is useful in therapy. The NHELP1 nucleic acid molecule, NHELP1
CC polypeptide and an agonist are particularly useful for manufacturing a
CC medicament for treating or preventing a disorder associated with
CC decreased expression or activity of human NHELP1. The antibody or its
CC antigen-binding fragment, and an antagonist, are useful for manufacturing
CC a medicament for treating or preventing a disorder associated with

CC increased expression or activity of human NHELP1. The NHELP1 nucleic acid
CC or protein is useful as passive replacement therapy, as a vaccine, or in
CC diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide
CC spanning the sequence of the human NHELP1 gene (ADC03514).
XX
SQ Sequence 17 BP; 3 A; 3 C; 1 G; 10 T; 0 U; 0 Other;

Query Match 16.7%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.4e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 935 TCTTCATGTTTAA 951
||| ||| ||| ||| |||
Db 1 TCTTCATGTTTAA 17

RESULT 133
AAAX15196
ID AAAX15196 standard; DNA; 18 BP.
XX
AC AAAX15196;
XX
DT 25-MAR-2003 (revised)
DT 28-APR-1999 (first entry)
XX
DE Triple helix forming oligonucleotide.
XX
KW Double-stranded DNA; triple helix; quinoline;
KW quinazoline-based structure; hydrogen bonding; ss.
XX
OS Synthetic.
XX
FN WO9623777-A1.
XX
PD 08-AUG-1996.
XX
PF 29-JAN-1996; 96WO-US001473.
XX
PR 01-FEB-1995; 95US-00384324.
XX
PA (UYNE-) UNIV NEBRASKA.
XX
PI Gold BI;
XX
DR WPI; 1996-371338/37.
XX
PT New substd. quinoline and quinazoline cpds. - are monomers for triple
PT helix-forming oligo:nucleotide analogues useful e.g. for treating tumours
PT or viral infection.
XX
PS Disclosure; Fig 1; 102pp; English.
XX
CC The present sequence represents a triple helix forming oligonucleotide
CC that form a triple helix with the double-stranded DNA sequence described
CC in AAAX15195. The specification describes novel monomeric compositions
CC which are substituted quinoline or quinazoline-based structures capable
CC of hydrogen bonding specifically with interstrand purine-pyrimidine pairs
CC in a double stranded Watson-Crick DNA molecule to form a triple-helix.
CC (Updated on 25-MAR-2003 to correct PF field.)
XX
SQ Sequence 18 BP; 0 A; 3 C; 0 G; 15 T; 0 U; 0 Other;

Query Match 16.7%; Score 12.2; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 5.6e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 908 TTTTCTTTGGTCTTTC 924
||||| ||| ||| ||| |||
Db 1 TTTTCTTTTCTTTC 17

RESULT 134
AAAX61956

```

1 AAX61956 standard; DNA; 18 BP.
2
3 AAX61956;
4
5 31-AUG-1999 (first entry)
6
7 Type-specific HPV probe SGP61.
8
9 PCR primer; probe; human papillomavirus; HPV; A region; B region;
10 C region; D region; detection; HPV genotype; cervical cancer; ss.
11
12 Synthetic.
13
14 Human papillomavirus.
15
16 WO914377-A2.
17
18 25-MAR-1999.
19
20 14-SEP-1998; 98WO-EP005829.
21
22 16-SEP-1997; 97EP-00870136.
23
24 (INNO-) INNOGENETICS NV.
25 (DELF-) DELFTS DIAGNOSTIC LAB BV.
26
27 Van Doorn L, Quint W, Kleter B, Ter Schegget J;
28
29 WPI; 1999-244048/20.
30
31 Detection and identification of human papillomavirus.
32
33 Claim 8; Page 32; 78pp; English.
34
35 AAX61849-X61982 and AAX62002-X62093 represent PCR primers and probes used
36 for detecting and/or identifying human papillomavirus (HPV) present in a
37 biological sample. The method comprises amplification of a polynucleic
38 acid fragment of HPV using a 5'-primer specifically hybridizing to the A
39 region or B region of the genome of at least one HPV type, and a 3'-
40 primer specifically hybridizing to the C region of at least one HPV type,
41 and hybridisation of the amplified fragments with at least one probe
42 capable of specific hybridization with the D region of at least one HPV
43 type. The primers individually or as a combination of 5'-primer and 3'-
44 primer, and the probes are used in the detection and/or identification of
45 HPV present in a biological sample. An isolated HPV polynucleotide, or
46 fragment, can also be used as a primer in a method for detection and/or
47 identification of HPV present in a sample. Identification of the
48 different HPV genotypes may have great clinical and epidemiological
49 importance. The presence of high-risk HPV types is a prognostic marker
50 for development and detection of cervical cancer.
51
52 Sequence 18 BP; 4 A; 0 C; 4 G; 10 T; 0 U; 0 Other;
53
54 Query Match 16.7%; Score 12.2; DB 1; Length 18;
55 Best Local Similarity 82.4%; Pred. No. 5.6e+02;
56 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
57
58 945 TGGTTTAATGATCGCT 961
59 |||||
60 1 TGGTTTAATGATGTT 17
61
62 RESULT 135
63 VA86642
64 ) AAA86642 standard; DNA; 18 BP.
65
66 ) AAA86642;
67
68 ) 04-DEC-2000 (first entry)
69
70 ) Cdc 2 kinase hammerhead ribozyme recogniton site #73.
71
72 ) Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.

```

```

OS Mammalia.
XX WO200032765-A2.
XX
XX 08-JUN-2000.
XX
XX 06-DEC-1999; 99WO-US028772.
XX
XX 04-DEC-1998; 98US-0110954P.
XX (IMMU-) IMMUSOL INC.
XX
XX Tritz R, Welch PJ, Barber JR, Robbins JM;
XX WPI; 2000-412314/35.
XX
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
XX RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
XX PCNA and Cyclin B1.
XX
XX Example 1; Page 19; 109pp; English.
XX
XX The present invention relates to a hairpin or hammerhead ribozyme,
XX designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
XX other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
XX Representative examples of ribozyme recognition sites are given in
XX AA82415 to AA86787. The ribozyme of the invention is useful for
XX inhibiting restenosis by introduction of the ribozyme into cells. The
XX ribozyme is resistant to endonuclease activity and hence is efficient in
XX restenosis treatment
XX
XX Sequence 18 BP; 2 A; 7 C; 2 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 16.7%; Score 12.2; DB 1; Length 18;
XX Best Local Similarity 82.4%; Pred. No. 5.6e+02;
XX Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 921 TTGCTTTTATCCCTCC 937
XX |||||
XX 2 TTGGATTCTATCCCTCC 18
XX
XX RESULT 136
XX AAA86643
XX ID AAA86643 standard; DNA; 18 BP.
XX
XX AC AAA86643;
XX
XX 04-DEC-2000 (first entry)
XX
XX
XX Cdc 2 kinase hammerhead ribozyme recogniton site #74.
XX
XX Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
XX
XX Mammalia.
XX WO200032765-A2.
XX
XX 08-JUN-2000.
XX
XX 06-DEC-1999; 99WO-US028772.
XX
XX 04-DEC-1998; 98US-0110954P.
XX (IMMU-) IMMUSOL INC.
XX
XX Tritz R, Welch PJ, Barber JR, Robbins JM;
XX WPI; 2000-412314/35.
XX
XX New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
XX RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
XX PCNA and Cyclin B1.
XX
XX

```


AAZ72820;
 10-SEP-2001 (first entry)
 Human biallelic marker upstream amplification primer SEQ ID NO:7176.
 Human genome; biallelic marker; high density disequilibrium map;
 genomic map; haplotype; phenotype; polymorphic base; genotyping;
 haplotyping; hybridisation; identification; characterisation;
 amplification; single nucleotide polymorphism; SNP; PCR primer;
 diagnosis; ss.
 Homo sapiens.
 WO9954500-A2.
 28-OCT-1999.
 21-APR-1999; 99WO-IB0000822.
 21-APR-1998; 98US-0082614P.
 23-NOV-1998; 98US-0109732P.
 (GEST) GENSET.
 Cohen D, Blumenfeld M, Chumakov I;
 WPI; 2000-013267/01.
 Novel biallelic markers used to construct a high density disequilibrium
 map of the human genome.
 Claim 9; Page 1761; 2745pp; English.
 AAZ5654 to AAZ69578 represent human biallelic markers from the present
 invention, which contain a polymorphic base at position 24 of their
 nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
 primers for the biallelic markers. The biallelic markers of the invention
 have a variety of uses: they can be used for high density mapping of the
 human genome, and in complex association studies and haplotyping studies
 which are useful in determining the genetic basis for disease states.
 Compositions and methods of the invention can also be useful for the
 identification of the targets for the development of pharmaceutical
 agents and diagnostic methods, as well as the characterisation of the
 differential efficacious responses to and side effects from
 pharmaceutical agents acting on a disease as well as other treatment.
 N.B. The SEQ ID Nos 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
 3367, are not actually given a sequence in the Sequence Listing from the
 present invention
 Sequence 18 BP; 7 A; 2 C; 8 G; 1 T; 0 U; 0 Other;
 Query Match 16.7%; Score 12.2; DB 1; Length 18;
 Best Local Similarity 82.4%; Pred. No. 5.6e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 929 TATCCCTCTCTTCATT 945
 |||||
 17 TGTCCTCTCTGCTCATT 1
 ASULT 140
 AS14539
 AAS14539 standard; DNA; 18 BP.
 AAS14539;
 18-DEC-2001 (first entry)
 Tobacco rbcl PCR primer 3-rbs.
 Tobacco; ss; PCR primer; 3-rbs; plastid; transplastomic plant;
 aminoglycoside 3'-adenyltransferase; aadA; 16s rri; rbcl;

ribosome binding site.
 Nicotiana tabacum.
 WO200170939-A1.
 27-SEP-2001.
 22-MAR-2001; 2001WO-US009318.
 22-MAR-2000; 2000US-0191147P.
 (ICON-) ICON GENETICS INC.
 Kuchuk NV;
 WPI; 2001-590174/66.
 Transforming plasmids, useful for making transplastomic plants, comprises
 transferring plasmid from one plant to another, transforming plasmid with
 desired nucleic acid and transferring transformed plasmid to different
 plant.
 Example 9; Page 15; 30pp; English.
 The invention relates to transforming plasmids, comprising transferring a
 plasmid from a cell of a plant to a cell of a genetically distinct plant,
 introducing a desired nucleic acid into the plasmid and transferring the
 transformed plasmid into a cell of a third plant, where the first and
 third plants are genetically identical or distinct from each other. The
 transforming plasmids are useful for making a transplastomic plant. The
 transplastomic plant from is regenerated from cells transformed with the
 plasmid and express a selectable marker gene. Unlike prior art
 techniques, the method provides easy and efficient plasmid manipulation
 in essentially all crop species, particularly economically important
 varieties (e.g. potato, tomato, tobacco, pepper and eggplant). The
 present sequence is a PCR primer which adds a sequence encoding a
 ribosome binding site form the tobacco rbcL gene to a promoter fragment
 from the tobacco 16s rri gene. This promoter is used to drive expression
 of an E. coli aminoglycoside 3'-adenyltransferase (aadA) gene when
 inserted into a transforming plasmid and expressed in a transplastomic
 plant
 Sequence 18 BP; 2 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
 Query Match 16.7%; Score 12.2; DB 1; Length 18;
 Best Local Similarity 82.4%; Pred. No. 5.6e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 922 TGCTTTTATCCCTCTCT 938
 |||||
 2 TGCCATGGATCCCTCTCT 18
 RESULT 141
 AAH61808
 ID AAH61808 standard; DNA; 18 BP.
 AAH61808;
 10-SEP-2001 (first entry)
 Cdc 2 kinase hammerhead ribozyme recognition site SEQ ID NO:4232.
 Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
 recognition site; target; ribozyme binding site; eye disease; vulvectomy;
 proliferative disease; skin disease; psoriasis; diabetic retinopathy;
 cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
 matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
 antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
 anti-sclerotic; ophthalmological; keratolytic; gene therapy; viral wart;
 atopic dermatitis; actinic keratosis; squamous cell carcinoma;
 basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;

1 antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
 2 antiskinning; ophthalmological; keratolytic; gene therapy; viral wart;
 3 atopic dermatitis; actinic keratosis; squamous cell carcinoma;
 4 basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
 5 sickle cell retinopathy; ss.
 6
 7 Homo sapiens.
 8 Synthetic.
 9
 10 WO200103062-A2.
 11
 12 03-MAY-2001.
 13
 14 26-OCT-2000; 2000WO-US029500.
 15
 16 26-OCT-1999; 99US-0161532P.
 17
 18 (IMMU-) IMMUSOL INC.
 19
 20 Robbins JM, Tritz R;
 21
 22 WPI; 2001-300427/31.
 23
 24 Treating proliferative skin or eye diseases and scarring, using ribozymes
 25 that cleave RNA encoding cytokines involved in inflammation, matrix
 26 metalloproteinases, growth factors and cell-cycle dependent kinases.
 27
 28 Disclosure; Page 381; 40pp; English.
 29
 30 The present invention describes a method for treating a proliferative
 31 skin or eye disease and scarring. The method involves administering a
 32 ribozyme (I) which cleaves RNA encoding a cytokine involved in
 33 inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
 34 dependent kinase, growth factor or a reductase, or administering a
 35 nucleic acid molecule (II) comprising a promoter operably linked to a
 36 nucleic acid segment encoding (I). (I) can have antipsoriatic,
 37 dermatological, cytostatic, antiseborrheic, antidiabetic, antiskinning,
 38 ophthalmological, vulnary, keratolytic and virucide activities, and
 39 cleaves RNA encoding cytokine involved in inflammation. (I) can be used
 40 in gene therapy. (I) and (II) are useful for treating proliferative skin
 41 diseases such as psoriasis, atopic dermatitis, actinic keratosis,
 42 squamous or basal cell carcinoma and viral or seborrheic wart. They can
 43 also be used for treating proliferative eye diseases such as diabetic
 44 retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
 45 prematurity and retinal detachment, and for treating and preventing
 46 scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
 47 scar. AAH57577 to AAH62039 represent sequences used in the
 48 exemplification of the present invention
 49
 50 Sequence 18 BP; 2 A; 6 C; 3 G; 7 T; 0 U; 0 Other;
 51
 52 Query Match 16.7%; Score 12.2; DB 1; Length 18;
 53 Best Local Similarity 82.4%; Pred. No. 5.6e+02;
 54 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 55
 56 Y 922 TGCCTTTTATCCCTCCT 938
 57
 58 1 TGGATTCTATCCCTCCT 17
 59
 60
 61
 62
 63
 64
 65
 66
 67
 68
 69
 70
 71
 72
 73
 74
 75
 76
 77
 78
 79
 80
 81
 82
 83
 84
 85
 86
 87
 88
 89
 90
 91
 92
 93
 94
 95
 96
 97
 98
 99
 100
 101
 102
 103
 104
 105
 106
 107
 108
 109
 110
 111
 112
 113
 114
 115
 116
 117
 118
 119
 120
 121
 122
 123
 124
 125
 126
 127
 128
 129
 130
 131
 132
 133
 134
 135
 136
 137
 138
 139
 140
 141
 142
 143
 144
 145
 146
 147
 148
 149
 150
 151
 152
 153
 154
 155
 156
 157
 158
 159
 160
 161
 162
 163
 164
 165
 166
 167
 168
 169
 170
 171
 172
 173
 174
 175
 176
 177
 178
 179
 180
 181
 182
 183
 184
 185
 186
 187
 188
 189
 190
 191
 192
 193
 194
 195
 196
 197
 198
 199
 200
 201
 202
 203
 204
 205
 206
 207
 208
 209
 210
 211
 212
 213
 214
 215
 216
 217
 218
 219
 220
 221
 222
 223
 224
 225
 226
 227
 228
 229
 230
 231
 232
 233
 234
 235
 236
 237
 238
 239
 240
 241
 242
 243
 244
 245
 246
 247
 248
 249
 250
 251
 252
 253
 254
 255
 256
 257
 258
 259
 260
 261
 262
 263
 264
 265
 266
 267
 268
 269
 270
 271
 272
 273
 274
 275
 276
 277
 278
 279
 280
 281
 282
 283
 284
 285
 286
 287
 288
 289
 290
 291
 292
 293
 294
 295
 296
 297
 298
 299
 300
 301
 302
 303
 304
 305
 306
 307
 308
 309
 310
 311
 312
 313
 314
 315
 316
 317
 318
 319
 320
 321
 322
 323
 324
 325
 326
 327
 328
 329
 330
 331
 332
 333
 334
 335
 336
 337
 338
 339
 340
 341
 342
 343
 344
 345
 346
 347
 348
 349
 350
 351
 352
 353
 354
 355
 356
 357
 358
 359
 360
 361
 362
 363
 364
 365
 366
 367
 368
 369
 370
 371
 372
 373
 374
 375
 376
 377
 378
 379
 380
 381
 382
 383
 384
 385
 386
 387
 388
 389
 390
 391
 392
 393
 394
 395
 396
 397
 398
 399
 400
 401
 402
 403
 404
 405
 406
 407
 408
 409
 410
 411
 412
 413
 414
 415
 416
 417
 418
 419
 420
 421
 422
 423
 424
 425
 426
 427
 428
 429
 430
 431
 432
 433
 434
 435
 436
 437
 438
 439
 440
 441
 442
 443
 444
 445
 446
 447
 448
 449
 450
 451
 452
 453
 454
 455
 456
 457
 458
 459
 460
 461
 462
 463
 464
 465
 466
 467
 468
 469
 470
 471
 472
 473
 474
 475
 476
 477
 478
 479
 480
 481
 482
 483
 484
 485
 486
 487
 488
 489
 490
 491
 492
 493
 494
 495
 496
 497
 498
 499
 500
 501
 502
 503
 504
 505
 506
 507
 508
 509
 510
 511
 512
 513
 514
 515
 516
 517
 518
 519
 520
 521
 522
 523
 524
 525
 526
 527
 528
 529
 530
 531
 532
 533
 534
 535
 536
 537
 538
 539
 540
 541
 542
 543
 544
 545
 546
 547
 548
 549
 550
 551
 552
 553
 554
 555
 556
 557
 558
 559
 560
 561
 562
 563
 564
 565
 566
 567
 568
 569
 570
 571
 572
 573
 574
 575
 576
 577
 578
 579
 580
 581
 582
 583
 584
 585
 586
 587
 588
 589
 590
 591
 592
 593
 594
 595
 596
 597
 598
 599
 600
 601
 602
 603
 604
 605
 606
 607
 608
 609
 610
 611
 612
 613
 614
 615
 616
 617
 618
 619
 620
 621
 622
 623
 624
 625
 626
 627
 628
 629
 630
 631
 632
 633
 634
 635
 636
 637
 638
 639
 640
 641
 642
 643
 644
 645
 646
 647
 648
 649
 650
 651
 652
 653
 654
 655
 656
 657
 658
 659
 660
 661
 662
 663
 664
 665
 666
 667
 668
 669
 670
 671
 672
 673
 674
 675
 676
 677
 678
 679
 680
 681
 682
 683
 684
 685
 686
 687
 688
 689
 690
 691
 692
 693
 694
 695
 696
 697
 698
 699
 700
 701
 702
 703
 704
 705
 706
 707
 708
 709
 710
 711
 712
 713
 714
 715
 716
 717
 718
 719
 720
 721
 722
 723
 724
 725
 726
 727
 728
 729
 730
 731
 732
 733
 734
 735
 736
 737
 738
 739
 740
 741
 742
 743
 744
 745
 746
 747
 748
 749
 750
 751
 752
 753
 754
 755
 756
 757
 758
 759
 760
 761
 762
 763
 764
 765
 766
 767
 768
 769
 770
 771
 772
 773
 774
 775
 776
 777
 778
 779
 780
 781
 782
 783
 784
 785
 786
 787
 788
 789
 790
 791
 792
 793
 794
 795
 796
 797
 798
 799
 800
 801
 802
 803
 804
 805
 806
 807
 808
 809
 810
 811
 812
 813
 814
 815
 816
 817
 818
 819
 820
 821
 822
 823
 824
 825
 826
 827
 828
 829
 830
 831
 832
 833
 834
 835
 836
 837
 838
 839
 840
 841
 842
 843
 844
 845
 846
 847
 848
 849
 850
 851
 852
 853
 854
 855
 856
 857
 858
 859
 860
 861
 862
 863
 864
 865
 866
 867
 868
 869
 870
 871
 872
 873
 874
 875
 876
 877
 878
 879
 880
 881
 882
 883
 884
 885
 886
 887
 888
 889
 890
 891
 892
 893
 894
 895
 896
 897
 898
 899
 900
 901
 902
 903
 904
 905
 906
 907
 908
 909
 910
 911
 912
 913
 914
 915
 916
 917
 918
 919
 920
 921
 922
 923
 924
 925
 926
 927
 928
 929
 930
 931
 932
 933
 934
 935
 936
 937
 938
 939
 940
 941
 942
 943
 944
 945
 946
 947
 948
 949
 950
 951
 952
 953
 954
 955
 956
 957
 958
 959
 960
 961
 962
 963
 964
 965
 966
 967
 968
 969
 970
 971
 972
 973
 974
 975
 976
 977
 978
 979
 980
 981
 982
 983
 984
 985
 986
 987
 988
 989
 990
 991
 992
 993
 994
 995
 996
 997
 998
 999
 1000

OS Homo sapiens.
 XX US6492173-B1.
 PN
 XX 10-DEC-2002.
 PD
 XX
 XX 01-AUG-2001; 2001US-00920760.
 PF
 XX
 XX 01-AUG-2001; 2001US-00920760.
 PR
 XX
 XX (ISIS-) ISIS PHARM INC.
 PA
 XX
 XX Cowser LM;
 PI
 XX
 XX WPI; 2003-361492/34.
 DR
 XX
 XX Novel antisense compound useful for treating diseases associated with
 PT Cyclin D2 expression, comprises an oligonucleotide comprising up to 50
 PT nucleobases in length, which inhibits expression of Cyclin D2 in cells or
 PT tissues in vitro.
 PS
 XX Example 15; Col 47-48; 40pp; English.
 XX
 CC The invention describes a compound (I) of up to 50 nucleobases in length,
 CC which inhibits the expression of Cyclin D2. (I) is useful for inhibiting
 CC the expression of Cyclin D2 in cells or tissues in vitro. (I) is thus
 CC useful for treating disease associated with Cyclin D2 expression. (I) is
 CC useful for diagnostics, therapeutics, prophylaxis and as research
 CC reagents and kits. This sequence represents human cyclin D2 inhibition
 CC associated oligonucleotide
 XX
 SQ Sequence 18 BP; 12 A; 4 C; 1 G; 1 T; 0 U; 0 Other;
 Query Match 16.7%; Score 12.2; DB 1; Length 18;
 Best Local Similarity 82.4%; Pred. No. 5.6e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 914 TTGGTCTTTGCTCTTTTA 930
 DB 18 TTGTTCTTTGCTCTTTTA 2
 RESULT 145
 ABX94553
 ID ABX94553 standard; DNA; 18 BP.
 XX
 AC ABX94553;
 XX
 DT 13-JUN-2003 (first entry)
 XX
 DE 23S/16S rRNA detecting probe SEQ ID 22.
 XX
 KW Detection; probe; contaminant; drinking water; Legionella; coliform;
 KW faecal streptococci; soil; sputum; biopsy; urine; food; pharmaceutical;
 KW cosmetic; fluorescent in situ hybridisation; FISH; ss.
 XX
 OS Streptococcus sp.
 XX
 PN WO2002102824-A2.
 XX
 PD 27-DEC-2002.
 XX
 XX 19-JUN-2002; 2002WO-EP006809.
 PF
 XX
 XX 19-JUN-2001; 2001DE-01029411.
 PR
 XX 11-DEC-2001; 2001DE-01060666.
 XX
 XX (VERM-) VERMICON AG.
 PA
 XX
 XX Beimfohr C, Snaird J;
 XX
 XX WPI; 2003-167479/16.
 XX
 XX

PT New oligonucleotides, useful for detecting bacteria that may contaminate
 PT drinking water, provide quick results for many species in parallel.
 XX
 PS Claim 8; Page 13; 53pp; German.

XX This invention describes novel oligonucleotide probes used to detect
 CC contaminant bacteria that may be present in drinking water. The probes
 CC can detect bacteria (especially Legionella, faecal streptococci and
 CC coliforms) that may contaminate drinking water in environmental samples
 CC (water or soil), clinical samples (sputum, biopsies, urine etc.), in
 CC bathing and drinking water and in foods, pharmaceuticals and cosmetics,
 CC by in situ hybridisation. The probes combine the advantages of
 CC fluorescent in situ hybridisation with those of culture methods. Only a
 CC relatively short culture step is required: analysis takes 24-48 hours
 CC (contrast many days for conventional methods) and all relevant bacteria
 CC can be tested simultaneously. The oligonucleotides can differentiate
 CC between species of the same genus and are easy to use, allowing simple
 CC analysis of a large number of samples. ABX94532-ABX94578 represent the
 CC oligonucleotide probes described in the invention
 XX

SQ Sequence 18 BP; 2 A; 6 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 16.7%; Score 12.2; DB 1; Length 18;
 Best Local Similarity 82.4%; Pred. No. 5.6e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Cy 932 CCTCTCTTCATGTT 948

Db 1 CACTCCTTACTTGGT 17

RESULT 146

ADB84612/c

ID ADB84612 standard; DNA; 18 BP.

XX ADB84612;

XX 04-DEC-2003 (first entry)

XX Human mitogen-activated protein kinase kinase 2 primer #12.

XX antiinflammatory; gene therapy; MEKK2; inflammatory reaction; human;

XX mitogen-activated protein kinase kinase 2; sequencing; ss; MEKK2;
 XX primer.

XX Homo sapiens.

XX US2003064496-A1.

XX 03-APR-2003.

XX 05-JUN-2002; 2002US-00163811.

XX 05-JUN-2002; 2002US-00163811.

XX (ATHE-) ATHEROGENICS INC.

XX Whalen AM, Cook CK, Sikorski JA;

XX WPI; 2003-540789/51.

XX New isolated nucleic acid molecule encoding a human MEKK2 protein, useful
 PT for modulating the activity of the protein, such as regulation of
 PT inflammatory reactions.

XX Example 1; Page 18; 54pp; English.

XX The invention describes an isolated nucleic acid molecule comprising a
 CC 1857 base pair sequence, given in the specification and encoding a MEKK2
 CC protein or its fragment, or encoding a fusion protein. The nucleic acid
 CC molecule is useful in modulating the activity of MEKK2 protein, such as
 CC regulation of inflammatory reactions. The MEKK2 protein is useful in
 CC identifying a compound that specifically modulates the expression or

CC activity of a non-MEKK2 protein, where lack of expression or activity of
 CC the MEKK2 protein as compared to the expression or activity of the non-
 CC MEKK2 protein indicates that the compound specifically modulates the
 CC expression or activity of the non-MEKK2 protein. This sequence represents
 CC a sequencing primer used to verify the authenticity of human mitogen-
 XX activated protein kinase kinase 2 (MEKK2) clones.

SQ Sequence 18 BP; 8 A; 3 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 16.7%; Score 12.2; DB 1; Length 18;
 Best Local Similarity 82.4%; Pred. No. 5.6e+02;
 Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Cy 937 CTCCTCATTTGGTTTAAAT 953

Db 17 CTCGTATTGGTATTAAT 1

RESULT 147

ADC98654

ID ADC98654 standard; DNA; 18 BP.

XX AC ADC98654;

XX DT 01-JAN-2004 (first entry)

XX DE Tobacco rbcL PCR primer 3-rbs.

XX plant transformation; plant plastid; autonomous replication;
 KW transgenic plant; plastome; tobacco; ss; primer; rbcL.

XX Nicotiana tabacum.

XX PN DE10132780-A1.

XX PD 16-JAN-2003.

XX PF 06-JUL-2001; 2001DE-01032780.

XX PR 06-JUL-2001; 2001DE-01032780.

XX (ICON-) ICON GENETICS AG.

XX PI Koop H, Muehlbauer S, Klaus S, Eibl C;

XX WPI; 2003-343941/33.

XX Genetic transformation of plant plastids, useful for preparing transgenic
 PT plants that do not contain a selection marker, also vector for the
 PT process.

XX Example 1; Page 11; 26pp; German.

XX This invention describes a novel method for genetic transformation of
 CC plant plastids. The method comprises providing a plant cell with DNA (I)
 CC that (i) contains a sequence that allows autonomous replication in a
 CC plant cell (ii) contains at least one desired sequence (iii) and (iii) for
 CC transcription: (a) is free of transcriptional and/or termination control
 CC elements linked to (ii) or (b) is free of transcriptional termination
 CC control elements linked to (ii). Replication of (I) is induced and
 CC selection made for plants, or cells, that contain genetically transformed
 CC plastids. The method is useful for producing transgenic plants (or cells)
 CC containing a modified plastome but no selection marker, specifically no
 CC antibiotic resistance gene. The vectors used in the process are not
 CC species-specific. This sequence represents a PCR primer used to amplify
 CC the tobacco (Nicotiana tabacum) rbcL ribosome binding site which is used
 CC in the construction of the plastid vector pICFBL.

SQ Sequence 18 BP; 2 A; 7 C; 4 G; 5 T; 0 U; 0 Other;

Query Match

16.7%; Score 12.2; DB 1; Length 18;

Best Local Similarity 82.4%; Pred. No. 5.6e+02;

```

Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
      922 TGCCTTTATCCCTCCT 938
      ||||| |||||
      2 TGCCATGGATCCCTCCT 18

RESULT 148
3139583/c
) ABI39583 standard; DNA; 12 BP.
)
) ABI39583;
)
) 22-FEB-2002 (first entry)
)
) Oligonucleotide primer SEQ ID NO 339556 for detecting SNP TSC0004850.
)
) SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
) peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
) central nervous system; gastrointestinal; respiratory; immune; metabolic.
)
) Homo sapiens.
)
) WO200177384-A2.
)
) 18-OCT-2001.
)
) 06-APR-2001; 2001WO-IB000713.
)
) 07-APR-2000; 2000DE-01019173.
)
) (EPIG-) EPIGENOMICS AG.
)
) Olek A, Piepenbrock C, Berlin K;
)
) WPI; 2001-657177/75.
)
) Set of oligonucleotides, useful for diagnosis and cell typing, is
) designed to detect single-nucleotide polymorphisms and cytosine
) methylation status.
)
) Claim 1; SEQ ID NO 339556; 29pp + Sequence Listing; German.
)
) This invention describes novel oligonucleotide primers or peptide nucleic
) acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
) and cytosine methylation status in chemically pretreated genomic DNA. The
) oligonucleotides are used for diagnosis and/or prognosis of cancer and a
) range of diseases including immune system, gastrointestinal, respiratory,
) central nervous system, cardiovascular and metabolic disorders. The
) oligomers are also used for detecting cell type differentiation. ABC00010
) -ABC99989, ABF0010-ABF99989, ABH0010-ABH99989 and ABI0010-ABI82073
) represent the oligomers described in the invention. NOTE: The sequence
) data for this patent did not form part of the printed specification, but
) was obtained in electronic format from WIPO at
) ftp.wipo.int/pub/published_pct_sequences
)
) Sequence 12 BP; 6 A; 3 C; 0 G; 3 T; 0 U; 0 Other;
)
) Query Match 16.4%; Score 12; DB 1; Length 12;
) Best Local Similarity 100.0%; Pred. No. 4.7e+02;
) Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
)
) 946 GGTTAATGTAT 957
) ||||| |||||
) 12 GGTTAATGTAT 1

RESULT 149
3139583/c
) AAX75700 standard; RNA; 15 BP.
)
) AAX75700;
)
)

28-JUL-1999 (first entry)
Human flt-1 and KDR hammerhead ribozyme target site #34.
Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
fms-like tyrosine kinase 1; kinase insert domain containing receptor;
foetal liver kinase 1; ss.
Homo sapiens.
WO9715662-A2.
01-MAY-1997.
25-OCT-1996; 96WO-US017480.
26-OCT-1995; 95US-0005974P.
11-JAN-1996; 96US-00584040.
(RIBO-) RIBOZYME PHARM INC.
(CHIR ) CHIRON CORP.
Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
WPI; 1997-259017/23.
Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
stability - useful for treating e.g. tumour angiogenesis, psoriasis,
rheumatoid arthritis, etc., in a human patient.
Example 9; Page 192; 218pp; English.
The present invention describes nucleic acid molecules which modulate the
synthesis, expression and/or stability of a mRNA encoding 1 or more
receptors of vascular endothelial growth factor (VEGF). A patient
(preferably human) having a condition associated with the level of the
fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
treated by administering the nucleic acid molecule or the expression
vector to the patient. AAX67275 to AAX75752 represent specific examples
of nucleic acid molecules from the present invention
Sequence 15 BP; 2 A; 3 C; 4 G; 0 T; 6 U; 0 Other;
Query Match 16.4%; Score 12; DB 1; Length 15;
Best Local Similarity 50.0%; Pred. No. 5.4e+02;
Matches 6; Conservative 6; Mismatches 0; Indels 0; Gaps 0;
QY 915 TGGTCTTTGCCCT 926
Db 2 UGUUCUUUGCCU 13

RESULT 150
AAZ65580
ID AAZ65580 standard; DNA; 15 BP.
XX
XX AAZ65580;
XX
XX 30-MAR-2000 (first entry)
XX
XX Immunosuppressant inhibitor oligonucleotide VEGF-445.
XX
XX Immunosuppressant inhibitor; transforming growth factor beta; TGF beta;
XX vascular endothelial growth factor; VEGF; interleukin-10; IL-10; cancer;
XX prostaglandin E2; PGE2; immune response; tumour; asthma; Crohn's disease;
XX monocyte chemotactic protein-1; MCP-1; ulcerative colitis; diabetes;
XX glomerulonephritis; acute respiratory distress syndrome; ss;
XX atherosclerosis.

```


OS Unidentified.
 XX WO9963975-A2.
 XX 16-DEC-1999.
 XX 10-JUN-1999; 99WO-EP004013.
 XX 10-JUN-1998; 98EP-00110709.
 XX 25-JUN-1998; 98EP-00113974.
 XX (BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.
 XX Schlingensiepen K, Schlingensiepen R, Brysch W;
 XX WPI; 2000-097470/08.
 XX Composition containing immune stimulant and inhibitor of agent that
 XX adversely affects the immune response, for treating cancers and
 XX infections.
 XX Claim 10; Fig 1; 30pp; English.
 XX This sequence is an immunosuppressant inhibitor oligonucleotide, which is
 XX used in the invention. The invention relates to a composition which
 XX contains at least one inhibitor (less than 100 kD) of a substance (e.g.
 XX transforming growth factor TGF-beta, vascular endothelial growth factor
 XX VEGF, interleukin-10, prostaglandin E2, PGE2, or their receptors)
 XX that adversely affects the immune response. The composition also includes
 XX at least one stimulant that positively affects the immune response. This
 XX oligonucleotide is an example of an inhibitor that is used in the
 XX composition. The composition is used as an immunostimulant for the
 XX treatment of neoplasms and infections, particularly hyperproliferation;
 XX leukaemia; (non-)Hodgkin's lymphoma; carcinoma (of oesophagus, bronchi,
 XX colon-rectum, stomach, intestine, gall bladder or duct, pancreas, anus,
 XX breast, ovary, cervix, endometrium, prostate or bladder), liver tumours,
 XX malignant melanoma, brain tumours and sarcomas. The oligonucleotides,
 XX most of which are directed against TGFbeta or VEGF, are inhibitors of
 XX monocyte chemotactic protein-1 (MCP-1) and are useful as anti-
 XX inflammatory for treating e.g. asthma, Crohn's disease, ulcerative
 XX colitis, diabetes, glomerulonephritis, acute respiratory distress
 XX syndrome and the formation of atherosclerotic plaque
 XX Sequence 15 BP; 0 A; 4 C; 3 G; 8 T; 0 U; 0 Other;
 XX
 Query Match 16.4%; Score 12; DB 1; Length 15;
 Best Local Similarity 100.0%; Pred. No. 5.4e+02;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 909 TTTCTTTGGTCT 920
 Db 2 TTTCTTTGGTCT 13
 RESULT 151
 AAF48241
 ID AAF48241 standard; DNA; 15 BP.
 XX AAF48241;
 XX 30-MAR-2001 (first entry)
 XX IGFBP3 oligonucleotide #1661.
 XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
 XX cytosatic; dermatological; cardiant; virucide; ophthalmological; keloid;
 XX skin disorder; insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;
 XX IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
 XX growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
 XX keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
 XX hyperneovascular condition; hyperplasia; kidney disease;
 XX neovascular condition of the retina; ss.

OS Homo sapiens.
 XX WO200078341-A1.
 XX 28-DEC-2000.
 XX 21-JUN-2000; 2000WO-AU000693.
 XX 21-JUN-1999; 99US-0140345P.
 XX (MURD-) MURDOCH CHILDRENS RES INST.
 XX Wraight CJ, Werther GA, Edmondson SR;
 XX WPI; 2001-041421/05.
 XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering
 XX UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
 XX inhibits or reduces growth factor mediated cell proliferation and/or
 XX inflammation.
 XX Example 7; Page 55; 20pp; English.
 XX The present invention relates to a method for ameliorating the effects of
 XX skin disorders. The method comprises contacting the skin with an
 XX antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
 XX receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
 XX inhibiting or reducing growth factor mediated cell proliferation,
 XX inflammation and/or other disorders. The present sequence is an
 XX oligonucleotide which can be used to design the antisense
 XX oligonucleotides of the present invention (see AAF45151 and AAF45153-
 XX F45161). The method is useful for ameliorating the effects of psoriasis,
 XX ichthyosis, ptyriasis, ruba, pilaris, serborrhea, keloids, keratosis,
 XX neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
 XX hyperneovascular condition such as a neovascular condition of the retina,
 XX brain or skin, growth factor-mediated malignancies, other sclerotic
 XX disease, kidney disease, hyperproliferation of the inside of blood
 XX vessels or any other hyperplasia
 XX Sequence 15 BP; 2 A; 7 C; 2 G; 4 T; 0 U; 0 Other;
 XX
 Query Match 16.4%; Score 12; DB 1; Length 15;
 Best Local Similarity 100.0%; Pred. No. 5.4e+02;
 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 932 CCCTCCTCTTCA 943
 Db 1 CCCTCCTCTTCA 12
 RESULT 152
 AAF48238
 ID AAF48238 standard; DNA; 15 BP.
 XX AAF48238;
 XX 30-MAR-2001 (first entry)
 XX IGFBP3 oligonucleotide #1658.
 XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
 XX cytosatic; dermatological; cardiant; virucide; ophthalmological; keloid;
 XX skin disorder; insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;
 XX IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
 XX growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
 XX keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
 XX hyperneovascular condition; hyperplasia; kidney disease;
 XX neovascular condition of the retina; ss.
 XX Homo sapiens.
 XX WO200078341-A1.

```

1 28-DEC-2000.
2
3 21-JUN-2000; 2000WO-AU0000693.
4
5 21-JUN-1999; 99US-0140345P.
6
7 (MURD-) MURDOCH CHILDRENS RES INST.
8
9 Wright CJ, Werther GA, Edmondson SR;
10 WPI; 2001-041421/05.
11
12 Ameliorating the effects of a disorder, e.g. psoriasis, by administering
13 UV (ultra-violet) treatment (optional) and an antisenescence nucleic acid that
14 inhibits or reduces growth factor mediated cell proliferation and/or
15 inflammation.
16
17 Example 7; Page 55; 201pp; English.
18
19 The present invention relates to a method for ameliorating the effects of
20 skin disorders. The method comprises contacting the skin with an
21 antisenescence oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
22 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
23 inhibiting or reducing growth factor mediated cell proliferation,
24 inflammation and/or other disorders. The present sequence is an
25 oligonucleotide which can be used to design the antisenescence
26 oligonucleotides of the present invention (see AAF45151 and AAF45153-
27 F45161). The method is useful for ameliorating the effects of psoriasis,
28 ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
29 neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
30 hyperneovascular condition such as a neovascular condition of the retina,
31 brain or skin, growth factor-mediated malignancies, other sclerotic
32 disease, kidney disease, hyperproliferation of the inside of blood
33 vessels or any other hyperplasia
34
35 Sequence 15 BP; 1 A; 7 C; 3 G; 4 T; 0 U; 0 Other;
36
37 Query Match 16.4%; Score 12; DB 1; Length 15;
38 Best Local Similarity 100.0%; Pred. No. 5.4e+02;
39 Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
40
41
42
43 932 CCTCTCTCTTCA 943
44 |||||
45 4 CCTCTCTCTTCA 15
46
47
48
49 RESULT 153
50 AAF48239
51 AAF48239 standard; DNA; 15 BP.
52
53 AAF48239;
54
55 30-MAR-2001 (first entry)
56
57 IGFBP3 oligonucleotide #1659.
58
59 Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
60 cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
61 skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
62 IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
63 growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
64 keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
65 hyperneovascular condition; hyperplasia; kidney disease;
66 neovascular condition of the retina; ss.
67
68 Homo sapiens.
69
70 WO200078341-A1.
71
72 28-DEC-2000.
73
74 21-JUN-2000; 2000WO-AU0000693.
75
76 21-JUN-1999; 99US-0140345P.
77
78 (MURD-) MURDOCH CHILDRENS RES INST.
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

```


angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be treated by administering the nucleic acid molecule or the expression vector to the patient. AAX67275 to AAX75752 represent specific examples of nucleic acid molecules from the present invention

Sequence 17 BP; 4 A; 3 C; 4 G; 0 T; 6 U; 0 Other;

Query Match 16.4%; Score 12; DB 1; Length 17;
Best Local Similarity 50.0%; Pred. No. 5.9e+02;
Matches 6; Conservative 6; Mismatches 0; Indels 0; Gaps 0;

915 TGGTCTTTGCGCT 926
:||||:||||:
3 UGGUCUUUGCCU 14

RESULT 157
AAX68751

AAX68751 standard; RNA; 17 BP.

AAX68751;

28-JUL-1999 (first entry)

Human flt1 VEGF receptor hammerhead ribozyme substrate #46.

Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1; KDR; hammerhead ribozyme; hairpin ribozyme; cleavage; fms-like tyrosine kinase 1 (flt-1); kinase insert domain containing receptor; foetal liver kinase 1; ss.

Homo sapiens.

WO9715662-A2.

01-MAY-1997.

25-OCT-1996; 96WO-US017480.

26-OCT-1995; 95US-0005974P.

11-JAN-1996; 96US-00584040.

(RIBO-) RIBOZYME PHARM INC.

(CHIR) CHIRON CORP.

Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;

WPI; 1997-259017/23.

Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA stability - useful for treating e.g. tumour angiogenesis, psoriasis, rheumatoid arthritis, etc., in a human patient.

Claim 4; Page 48; 218pp; English.

The present invention describes nucleic acid molecules which modulate the synthesis, expression and/or stability of a mRNA encoding 1 or more receptors of vascular endothelial growth factor (VEGF). A patient (preferably human) having a condition associated with the level of the fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be treated by administering the nucleic acid molecule or the expression vector to the patient. AAX67275 to AAX75752 represent specific examples of nucleic acid molecules from the present invention

Sequence 17 BP; 4 A; 3 C; 4 G; 0 T; 6 U; 0 Other;

Query Match 16.4%; Score 12; DB 1; Length 17;
Best Local Similarity 50.0%; Pred. No. 5.9e+02;
Matches 6; Conservative 6; Mismatches 0; Indels 0; Gaps 0;

QY 915 TGGTCTTTGCGCT 926
:||||:||||:
Db 2 UGGUCUUUGCCU 13

RESULT 158
ACC65172

ACC65172 standard; DNA; 17 BP.

ACC65172;

01-JUL-2003 (first entry)

Murine oligonucleotide associated with tumour suppression, SEQ ID 2419.

Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine; tumour suppression; tumour reversion; apoptosis; virus resistance; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; ss.

Mus musculus.

WO2003025176-A2.

27-MAR-2003.

17-SEP-2002; 2002WO-IB004210.

17-SEP-2001; 2001PR-00011979.

(MOLE-) MOLECULAR ENGINES LAB.

Telerman A, Amson R, Tuijnder M;

WPI; 2003-333167/31.

New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.

Disclosure; Page 313; 738pp; French.

The present invention relates to murine oligonucleotides (ACC62754-ACC6806), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligonucleotides are useful as (1) as probes and primers for detecting, identifying, quantifying and/or amplifying nucleic acid, e.g. as one component of a gene chip; in vitro as (anti)sense reagents; and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, CC specifically cancer but also Alzheimer's disease and schizophrenia

Sequence 17 BP; 3 A; 3 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 16.4%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 5.9e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 900 CCTGGTCATTTT 911
|||||
Db 4 CCTGGTCATTTT 15

RESULT 159
AAZ30575/C

AAZ30575 standard; DNA; 18 BP.

AAZ30575;

18-JAN-2000 (first entry)

Human integrin alpha 4 gene antisense oligonucleotide ISIS #24459.

```

XX Human; integrin; antisense; oligonucleotide; inhibition; expression;
KW very late antigen; CD49d; CD23; cell surface; leucocyte; adhesion;
KW vascular endothelial cell; vascular endothelium; migration; inflammation;
KW atherosclerosis; allergy; asthma; rheumatoid arthritis; tumor;
KW metacastasis; circulatory system; autoimmune disease; Grave's disease;
KW Hashimoto's thyroiditis; encephalomyelitis; multiple sclerosis; ss.
XX Synthetic.
OS Homo sapiens.
OS US5968826-A.
FN 19-OCT-1999.
XX
XX 05-OCT-1998; 98US-00166203.
FF
FR 05-OCT-1998; 98US-00166203.
XX
FA (ISIS-) ISIS PHARM INC.
XX
FI Bennett CF, Cowsett LM, Condon TP;
XX
FR WPI; 1999-590416/50.
XX
XX Antisense inhibition of integrin alpha4 expression useful for treating
PT inflammatory diseases such as atherosclerosis, allergies, asthma and
FT arthritis.
XX
XX Example 8; Col 25; 40pp; English.
XX
XX The invention relates to the generation of antisense oligonucleotides
CC targeted to the integrin alpha4 gene (human sequence AAZ30555) which are
CC used for inhibiting expression of the integrin alpha4 mRNA or protein.
CC The oligonucleotides AAZ30556-Z30594 are used to inhibit human integrin
CC alpha4 protein expression. Integrin alpha4 is a component of Very Late
CC Antigen (VLA)-4 (also called alpha4beta1 and CD49d/CD29). VLA-4 is
CC expressed on the cell surfaces of leucocytes and vascular endothelial
CC cells and mediates the adhesion of leucocytes to the vascular endothelium
CC prior to migration into the surrounding tissues. This migration is an
CC essential step in inflammation and hence VLA-4 (and consequently integrin
CC alpha4) is a potential therapeutic target for treating inflammatory
CC diseases and the damaging effects of excessive inflammation. These
CC disorders include atherosclerosis, allergies, asthma, rheumatoid
CC arthritis and tumor cell metastasis (VLA-4 is involved in migration of
CC the tumor cells through the extracellular matrix into the circulatory
CC system). VLA-4 is also involved in a number of autoimmune diseases such
CC as Grave's disease, Hashimoto's thyroiditis, encephalomyelitis (EAE),
CC multiple sclerosis. VLA-4 may also be involved in promoting adhesion
CC (i.e. retention) of hematopoietic stem cells in bone-marrow and in
CC allograft rejection
XX
SQ Sequence 18 BP; 7 A; 5 C; 4 G; 2 T; 0 U; 0 Other;
Query Match 16.4%; Score 12; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 6.1e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
CY 901 CTGGTCATTTC 912
DB 12 CTGGTCATTTC 1
RESULT 160
AAS10237/c
ID AAS10237 standard; DNA; 18 BP.
XX
AC AAS10237;
XX
XX 24-OCT-2001 (first entry)
XX
XX Antisense oligonucleotide for human integrin alpha 4, ISIS 24459.

```

```

KW Integrin alpha 4; antisense; very late antigen 4; VLA4;
KW autoimmune disease; inflammatory disease; rheumatoid arthritis;
KW multiple sclerosis; tumor metastasis; melanoma; asthma; psoriasis;
KW allergy; Grave's disease; Hashimoto's thyroiditis; oligonucleotide;
XX systemic lupus erythematosus; allograft rejection; ISIS 24459; ss.
OS Homo sapiens.
OS Synthetic.
XX
XX Key Location/Qualifiers
FH 1. .18
FT /mod_base= OTHER
FT /tag= a
FT /note= "Other= all cytosines are 5-methyl cytosine"
FT modified_base
FT 1. .18
FT /tag= b
FT /mod_base= OTHER
FT /note= "Other= Phosphorothioate backbone"
FT modified_base
FT 1. .4
FT /tag= c
FT /mod_base= OTHER
FT /note= "Other= 2' methoxyethoxy residues"
FT modified_base
FT 5. .14
FT /tag= d
FT /mod_base= OTHER
FT /note= "Other= 2' deoxy residues"
FT modified_base
FT 15. .18
FT /tag= e
FT /mod_base= OTHER
FT /note= "Other= 2' methoxyethoxy residues"
XX
XX US6258790-B1.
PN
XX 10-JUL-2001.
PD
XX 19-AUG-1999; 99US-00377309.
PF
XX 05-OCT-1998; 98US-00166203.
PR
XX (ISIS-) ISIS PHARM INC.
PA
XX Bennett CF, Condon TP, Cowsett LM;
XX WPI; 2001-450381/48.
DR
XX Composition for treating inflammatory and autoimmune diseases, comprises
PT antisense compound targeted to nucleic acid molecule encoding integrin
PT alpha4 and inhibit expression of integrin alpha4.
XX
XX Example 8; Col 25; 49pp; English.
XX
XX The sequence is an antisense oligonucleotide targeting human integrin 4,
CC a protein involved in autoimmune and inflammatory diseases. The invention
CC relates to antisense inhibitors of integrin alpha 4 which target and
CC inhibit expression of integrin alpha 4. The antisense molecules are
CC useful for inhibiting the expression of integrin alpha4 in human cells or
CC tissues, treating an animal having a disease or condition associated with
CC expression of integrin alpha4, e.g.; inflammatory disease or condition,
CC autoimmune disease or condition including rheumatoid arthritis, multiple
CC sclerosis and tumor metastases, melanoma, asthma, psoriasis, allergy,
CC Grave's disease, Hashimoto's thyroiditis, systemic lupus erythematosus
CC and allograft rejection, and diseases or conditions characterised by
CC leukocyte migration into affected tissues, preferably central nervous
CC system tissues. The antisense molecules are also useful for reducing the
CC levels of VLA-4 and alpha4beta7 integrin in human cells or tissues, and
CC reducing the adherence of cells of a first type e.g., melanoma cells or
CC lymphocytes, to cells of a second type e.g., endothelial cells, by
CC inhibiting integrin alpha4 expression and thus decreasing adhesion of
CC cells
XX
SQ Sequence 18 BP; 7 A; 5 C; 4 G; 2 T; 0 U; 0 Other;
Query Match 16.4%; Score 12; DB 1; Length 18;

```

Best Local Similarity 100.0%; Pred. No. 6.1e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

7 901 CTGGTCATTTC 912
12 CTGGTCATTTC 1

RESULT 161
AAV48734
AAV48734 standard; DNA; 15 BP.

AAV48734;
15-OCT-1998 (first entry)
ErbB-2 gene antisense oligonucleotide ErbB-2-26.
ErbB-2; antisense oligonucleotide; modulate; gene expression; ss.
Synthetic.
Homo sapiens.
EP856579-A1.
05-AUG-1998.
31-JAN-1997; 97EP-00101531.
31-JAN-1997; 97EP-00101531.
(BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.
Schlingensiepen K, Brysch W;
WPI; 1998-400910/35.
Preparation of antisense oligonucleotide(s) which lack long runs of consecutive guanosine or inosine - and have specific ratio of residues able to form two or three hydrogen bonds, have greater activity and reduced toxicity, used therapeutically or to modulate growth of cells in culture.

Claim 10; Fig 6a; 286pp; English.

AAV48709-886 represent antisense oligonucleotides directed against the ErbB-2 gene. Of these, only oligonucleotides AAV48709-91 resulted in significant reduction in ErbB-2 protein expression, while oligonucleotides AAV48792-886 had little effect. The oligonucleotides exemplify the invention. The specification describes oligonucleotides that contain 8-30 nucleotides, which contain at most 8 nucleotides that can each form three hydrogen bonds to cytosine; do not contain four consecutive nucleotides able to form three H-bonds each to four consecutive cytosines; do not contain two sequences of three consecutive nucleotides each able to form three H-bonds to three consecutive cytosines, and the ratio between residues able to form two H-bonds each (2R) or three such bonds (3R) is given by 2R/3R = 0.33-0.72. The oligonucleotides are used to modulate expression of genes, particularly the genes for p53, ErbB-2, junB, junD, TGF-beta 1 or beta 2 to control proliferation of primary cell cultures (e.g. bone marrow stem, liver or kidney cells, osteoclasts, osteoblasts and/or keratinocytes). The oligonucleotides can also be used to analyse function of proteins (by altering their expression or activity) and therapeutically, e.g. in cases of cancer or (targeting TGF) for stimulating the immune system

Sequence 15 BP; 2 A; 6 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 16.2%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 5.8e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

933 CCTCCTCTTCATTGG 947
|||||

Db 1 CCTCCTCTTCAGAGG 15

RESULT 162
AAF52178/C
AAF52178 standard; DNA; 15 BP.

XX
AAF52178;
30-MAR-2001 (first entry)
IGF-I oligonucleotide #3138.
Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.
XX Homo sapiens.
OS
XX WO200078341-A1.
XX
XX 28-DEC-2000.
XX
XX 21-JUN-2000; 2000WO-AU000693.
XX
XX 21-JUN-1999; 99US-0140345P.
XX (MURD-) MURDOCH CHILDRENS RES INST.
XX
XX Wright CJ, Werther GA, Edmondson SR;
XX
XX WPI; 2001-041421/05.
XX
XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 8; Page 81; 201pp; English.

PS
XX
XX The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia

XX
SQ Sequence 15 BP; 8 A; 2 C; 2 G; 3 T; 0 U; 0 Other;
Query Match 16.2%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 5.8e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 940 TTCATTGGTTTAATG 954
|||||
Db 15 TTCACGTGTTTAATG 1
|||||

RESULT 163

Sequence 17 BP; 4 A; 2 C; 4 G; 0 T; 7 U; 0 Other;
 Query Match 16.2%; Score 11.8; DB 1; Length 17;
 Best Local Similarity 40.0%; Pred. No. 6.3e+02;
 Matches 6; Conservative 7; Mismatches 2; Indels 0; Gaps 0;
 944 TTGGTTTAAATGATC 958
 :||::||:|:|:
 3 UUGGUUUAUCAAUC 17
 RESULT 170
 AA21147
 AAA21147 standard; RNA; 17 BP.
 AAA21147;
 19-JUN-2000 (first entry)
 Integrin alpha 6 subunit substrate sequence SEQ ID NO:4373.
 Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
 integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
 hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;
 ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
 dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
 age related macular degeneration; inflammation; neovascular glaucoma;
 myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
 tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
 Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
 Homo sapiens.
 WO9950403-A2.
 07-OCT-1999.
 24-MAR-1999; 99WO-US006507.
 27-MAR-1998; 98US-0079678P.
 (RIBO-) RIBOZYME PHARM INC.
 Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;
 WPI; 1999-591315/50.
 Novel ribozymes for modulating the synthesis, expression and/or stability
 of an mRNA encoding an angiogenic factors.
 Claim 55; Page 190; 305pp; English.
 The present invention describes enzymatic nucleic acid molecules with RNA
 cleaving activity, which specifically cleave RNA encoded by an aryl
 hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
 gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
 AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
 and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
 corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
 AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
 and AAA19155 to AAA19222 represent their corresponding target sequences;
 AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
 sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
 AAA21596 to AAA21688 represent their corresponding target sequences;
 AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence
 for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
 AAA23422 represent their corresponding target sequences. The ribozymes of
 the invention are used for modulating the synthesis, expression and/or
 stability of an mRNA encoding angiogenic factor, especially ARNT,
 integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
 especially used to treat cancer, diabetic retinopathy, age related
 macular degeneration (ARMD), inflammation, and arthritis, as well as

CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
 CC angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber
 CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
 CC and other syndromes and diseases related to the levels of ARNT, Tie-2,
 CC integrin subunit alpha-6, or integrin subunit beta-3
 XX
 SQ Sequence 17 BP; 5 A; 2 C; 3 G; 0 T; 7 U; 0 Other;
 Query Match 16.2%; Score 11.8; DB 1; Length 17;
 Best Local Similarity 40.0%; Pred. No. 6.3e+02;
 Matches 6; Conservative 7; Mismatches 2; Indels 0; Gaps 0;
 944 TTGGTTTAAATGATC 958
 :||::||:|:|:
 2 UUGGUUUAUCAAUC 16
 RESULT 171
 AAV93544
 ID AAV93544 standard; RNA; 17 BP.
 XX
 AC AAV93544;
 XX
 18-FEB-1999 (first entry)
 Human B-raf substrate nucleotide position 1603.
 DE
 XX
 Human; c-raf; A-raf; B-raf; hammerhead ribozyme; hairpin ribozyme;
 KW target; substrate; catalyst; modulation; expression; Raf gene; delivery;
 KW screening; identification; synthesis; deprotection; purification; cancer;
 KW inflammation; psoriasis; non-hepatic ascites; infection; genetic drift;
 KW restenosis; rheumatoid arthritis; ss.
 XX
 OS Homo sapiens.
 XX
 WO9850530-A2.
 XX
 12-NOV-1998.
 XX
 05-MAY-1998; 98WO-US009249.
 XX
 09-MAY-1997; 97US-0046059P.
 PR 09-JUN-1997; 97US-0049002P.
 PR 03-JUL-1997; 97US-0051718P.
 PR 22-AUG-1997; 97US-0056808P.
 PR 02-OCT-1997; 97US-0061321P.
 PR 02-OCT-1997; 97US-0061324P.
 PR 05-NOV-1997; 97US-0064866P.
 PR 19-DEC-1997; 97US-0068212P.
 XX
 (RIBO-) RIBOZYME PHARM INC.
 XX
 Jarvis T, Matulic-Adamic J, Reynolds M, Kisich K, Bellon L;
 PI Parry T, Beigelman L, Mcswiggen JA, Karpeisky A, Burgin A;
 PI Thompson J, Workman CT, Beaudry A, Sweedler D;
 XX
 WPI; 1999-009494/01.
 XX
 Identifying new catalytic nucleic acid that modulates selected processes
 PT - especially ribozymes that cleave Raf RNA for treating cancer,
 PT restenosis, and also new ribozymes and modified nucleoside triphosphates
 PT used as antiviral agents and synthons.
 XX
 Claim 177; Page 169; 259pp; English.
 PS
 A method has been developed for the identification of a nucleic acid
 CC capable of modulating a process in a biological system. The method
 CC comprises: (a) introducing into the system a random library of nucleic
 CC acid catalysts (NAC) having a substrate binding domain (SBD), comprising
 CC a random sequence, and a catalytic domain (CD); and (b) identifying NAC
 CC in systems where modulation has occurred and/or determining the sequence
 CC of at least part of the SBDs in such systems. Nucleic acid molecules with
 CC endonuclease activity and catalytic activity, from the present invention,

CC are used to modulate gene expression in plant and mammalian cells and to
 CC cleave target nucleic acid, particularly for treating systemic diseases
 CC caused by specific RNA, e.g. cancer, inflammation, psoriasis, non-hepatic
 CC ascites and infection. They may also be used to detect genetic drift and
 CC mutations in diseased cells and to determine c-raf RNA. Specifically NACs
 CC with RNA-cleaving activity that modulate expression of the Raf gene, are
 CC used to treat cancer, restenosis, psoriasis or rheumatoid arthritis, or
 CC generally any condition associated with the level of c-raf. Introduction
 CC of sugar/phosphate modifications increases stability against nuclease and
 CC activity. AAV90922 to AAV93877 represent NACs that can be used in the
 CC method, specifically for modulating the expression of a Raf gene
 XX
 SQ Sequence 17 BP; 3 A; 5 C; 3 G; 0 T; 6 U; 0 Other;

Query Match 16.2%; Score 11.8; DB 1; Length 17;
 Best Local Similarity 53.3%; Pred. No. 6.3e+02;
 Matches 8; Conservative 5; Mismatches 2; Indels 0; Gaps 0;

Qy 933 CCTCTCTTCATTGG 947
 |||:|:|:|:|:|
 Db 3 CCACUCUUCUAGGG 17

RESULT 173
 AAX32865/C
 ID AAX32865 standard; DNA; 17 BP.

AC AAX32865;
 XX
 XX 27-AUG-2003 (revised)
 DT 20-MAR-2003 (revised)
 DT 28-JUN-1999 (first entry)
 XX

XX HBV pre-S gene promoter fragment binding TFO B4.
 XX Triplex-forming oligonucleotide; TFO; promoter region; pre-S gene;
 KW inhibition; hepatitis B virus; HBV adr subtype; DR region; ss.
 XX
 XX Synthetic.

OS Hepatitis B virus.
 XX
 XX Key Location/Qualifiers
 FH 17
 FT misc_feature /*tag= a
 FT /*note= "optional monophosphorylation (claim 2)"
 PT
 XX
 XX W09920641-A1.

XX
 XX 29-APR-1999.
 XX
 XX 19-OCT-1998; 98WO-CN000248.
 XX
 XX 21-OCT-1997; 97CN-00106667.

XX (SHAN-) SHANGHAI INST BIOCHEMISTRY CHINESE ACAD.
 XX
 XX Lu C;
 XX
 XX WPI; 1999-288270/27.

XX Triplex-forming oligonucleotides, useful for, e.g. inhibition of
 XX hepatitis B virus (HBV).
 XX
 XX Claim 1, 2; Page 22; 39pp; Chinese.
 XX

XX The invention provides triplex-forming oligonucleotides (TFO) and their
 CC modified derivatives. TFO B1-B5 (AAX32862-866) can bind with the promoter
 CC region of pre-S gene in inhibition of hepatitis B virus (HBV) adr subtype
 CC and TFO B11, B12 and B15 (AAX32868-870) can bind with DR region of HBV.
 CC The oligonucleotides are useful for inhibition of HBV and as drug in
 CC treatment of hepatitis B. Since the length of the oligonucleotides can be
 CC suitably increased, the stability and specificity of the formed triplex
 CC DNA with 2 similar homopoly purine/homopoly pyrimidine fragments are

CC higher. Triplex formation is specifically targeting on the HBV gene
 CC expression, DNA replication and reproduction, or to produce (DNA)2:RNA
 CC hybrid triplex with target sequence of RNA in stopping RNA reverse
 CC transcription, so there is little effect on the human cells. Such
 CC oligonucleotides are chemically modified by 3'-terminal
 CC monophosphorylation, leading to more significant inhibition due to their
 CC higher stability, and the degradation products of the modified
 CC oligonucleotides are not toxic to the body. (Updated on 20-MAR-2003 to
 CC correct DR field.) (Updated on 27-AUG-2003 to correct OS field.)
 XX
 SQ Sequence 17 BP; 6 A; 0 C; 11 G; 0 T; 0 U; 0 Other;

Query Match 16.2%; Score 11.8; DB 1; Length 17;
 Best Local Similarity 86.7%; Pred. No. 6.3e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 931 TCCCTCCTCTTCATT 945
 |||||:|:|:|:|:|
 Db 15 TCCCTCCTCTCTCTT 1

RESULT 173
 AAF07400
 ID AAF07400 standard; DNA; 17 BP.

AC AAF07400;
 XX
 XX 16-FEB-2001 (first entry)
 DT
 XX Hammerhead ribozyme substrate #3657.

XX Ribozyme; erythropoietin; granulocyte colony stimulating factor;
 KW interferon alpha; ss.
 XX
 XX Homo sapiens.

OS
 XX WO200061729-A2.
 XX
 XX 19-OCT-2000.
 XX

XX 11-APR-2000; 2000WO-US009721.

XX 12-APR-1999; 99US-0129390P.

XX (RIBO-) RIBOZYME PHARM INC.

XX Blatt L, Zwick M, Pavco P, Meswiggen J;

XX WPI; 2000-647423/62.

XX Enzymatic and antisense nucleic acid inhibition of repressor genes,
 PT useful for producing e.g. granulocyte colony stimulating factor protein,
 PT interferon alpha and erythropoietin.

XX Claim 54; Page 139; 164pp; English.

XX The present invention relates to enzymatic and antisense nucleic acid
 CC molecules that act as inhibitors of the expression of repressor genes
 CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription
 CC factor gene, IRF-2 and/or the CAAT Displacement Protein (CDP).
 CC Inhibition of the repressors removes prevents inhibition (and
 CC consequently increases expression of) genes involved in the production of
 CC erythropoietin, granulocyte colony stimulating factor protein and
 CC interferon alpha
 XX

XX Sequence 17 BP; 0 A; 6 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 16.2%; Score 11.8; DB 1; Length 17;
 Best Local Similarity 86.7%; Pred. No. 6.3e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 919 CTTTGCCTTTTATCC 933
 |||||:|:|:|:|:|

```

1 CTTGCTTGTGTC 15
RESULT 174
BK03416
ABK03416 standard; RNA; 17 BP.
ABK03416;
12-MAR-2002 (first entry)
Human CD20 G-cleaver #31.
Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;
muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
DNAzyme; inozyme; G-cleaver; amberzyme; zinczyme; lymphoma; leukaemia;
B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
inflammatory arthropathy; central nervous system injury;
cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
Parkinson's disease; ataxia; Huntington's disease;
Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
Homo sapiens.
Synthetic.
WO200159103-A2.
16-AUG-2001.
09-FEB-2001; 2001WO-US004273.
11-FEB-2000; 2000US-0181797P.
28-FEB-2000; 2000US-0185516P.
06-MAR-2000; 2000US-0187128P.
(RIBO-) RIBOZYME PHARM INC.
(BLAT/) BLATT L.
(MCSW/) MCSWIGGEN J.
(CHOW/) CHOWRIRA B M.
Blatt L, Mcswiggen J, Chowrira BM;
WPI; 2001-607195/69.
Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
constructs, which down regulate expression of a CD20 gene or neurite
growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
central nervous system injury.
Claim 30; Page 152; 200pp; English.
The invention relates to a nucleic acid molecule which down regulates
expression of a CD20 gene and a nucleic acid molecule which down
regulates expression of a neurite growth inhibitor gene (NOGO). The
nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
DNAzyme) an inozyme (an endolytic nucleic acid cleaving an RNA molecule
possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or
an amberzyme (cleaving RNA with an NGN triplet), a zinczyme (cleaving RNA
with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA
of CD20 in the presence of a divalent cation that is preferably Mg2+.
Furthermore, it may be contacted with a cell to reduce CD20 activity of
the cell and treat a patient having a condition associated with the level
of CD20. The treatment may further comprise the use of one or more
therapies. In particular, the CD20 targeting nucleic acid may be used to
treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-

```

```

CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the
CC presence of a divalent cation that is preferably Mg2+. Furthermore, the
CC nucleic acid may be contacted with a cell to reduce NOGO activity of the
CC cell and treat a patient having a condition associated with the level of
CC NOGO. The treatment may further comprise the use of one or more
CC therapies. In particular, the NOGO-targeting nucleic acid may be used to
CC treat central nervous system (CNS) injury and cerebrovascular accident
CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
CC disease, muscular dystrophy, and/or other neurodegenerative disease
CC states which respond to the modulation of NOGO expression. The present
CC sequence is a G-cleaver molecule of the invention
XX
SQ Sequence 17 BP; 1 A; 5 C; 2 G; 0 T; 9 U; 0 Other;
Query Match 16.2%; Score 11.8; DB 1; Length 17;
Best Local Similarity 33.3%; Pred. No. 6.3e+02;
Matches 5; Conservative 8; Mismatches 2; Indels 0; Gaps 0;
QY 915 TGGTCTTGTGCTTTT 929
Db 1 UGACUUCUUGCCUUCU 15
RESULT 175
ABK02836
ID ABK02836 standard; RNA; 17 BP.
XX
AC ABK02836;
XX
DT 12-MAR-2002 (first entry)
XX
DE Human CD20 Hammerhead ribozyme #135.
XX
KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;
KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
KW DNAzyme; inozyme; G-cleaver; amberzyme; zinczyme; lymphoma; leukaemia;
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
KW inflammatory arthropathy; central nervous system injury;
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
KW Parkinson's disease; ataxia; Huntington's disease;
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200159103-A2.
XX
PD 16-AUG-2001.
XX
PF 09-FEB-2001; 2001WO-US004273.
XX
PR 11-FEB-2000; 2000US-0181797P.
PR 28-FEB-2000; 2000US-0185516P.
PR 06-MAR-2000; 2000US-0187128P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J.
PA (CHOW/) CHOWRIRA B M.
XX
PI Blatt L, Mcswiggen J, Chowrira BM;
WPI; 2001-607195/69.
XX
PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
PT constructs, which down regulate expression of a CD20 gene or neurite
PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and

```

PT central nervous system injury.

XX Claim 30; Page 142; 200pp; English.

XX The invention relates to a nucleic acid molecule which down regulates

CC expression of a CD20 gene and a nucleic acid molecule which down

CC regulates expression of a neurite growth inhibitor gene (NOGO). The

CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a

CC DNzyme) an inozyme (an endolytic nucleic acid cleaving a RNA molecule

CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr

CC an amberzyme (cleaving RNA with an NGN triplet), a zinczyme (cleaving RNA

CC with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA

CC of CD20 in the presence of a divalent cation that is preferably Mg²⁺.

CC Furthermore, it may be contacted with a cell to reduce CD20 activity of

CC the cell and treat a patient having a condition associated with the level

CC of CD20. The treatment may further comprise the use of one or more

CC therapies. In particular, the CD20 targeting nucleic acid may be used to

CC treat central nervous system (CNS) injury and cerebrovascular accident

CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),

CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),

CC parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob

CC disease, muscular dystrophy, and/or other neurodegenerative disease

CC states which respond to the modulation of NOGO expression. The present

CC invention is a hammerhead ribozyme of the invention

XX Sequence 17 BP; 1 A; 5 C; 3 G; 0 T; 8 U; 0 Other;

XX

Query Match 16.2%; Score 11.8; DB 1; Length 17;

Best Local Similarity 33.3%; Pred. No. 6.3e+02;

Matches 5; Conservative 8; Mismatches 2; Indels 0; Gaps 0;

QY 915 TGGTCTTTCCTTT 929

Db 3 UGAUCUUGCCUUCU 17

RESULT 176

ABK02837

XX ID ABK02837 standard; RNA; 17 BP.

XX AC ABK02837;

XX DT 12-MAR-2002 (first entry)

XX CE Human CD20 Hammerhead ribozyme #136.

XX Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;

XX cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;

XX muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;

XX DNzyme; inozyme; G-cleaver; amberzyme; zinczyme; lymphoma; leukaemia;

XX B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;

XX human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;

XX MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;

XX inflammatory arthropathy; central nervous system injury;

XX cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;

XX chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;

XX Parkinson's disease; ataxia; Huntington's disease;

XX Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.

XX Homo sapiens.

XX Synthetic.

XX

PN WO200159103-A2.

XX 16-AUG-2001.

XX 09-FEB-2001; 2001WO-US004273.

XX 11-FEB-2000; 2000US-0181797P.

XX 28-FEB-2000; 2000US-0185516P.

XX 06-MAR-2000; 2000US-0197128P.

XX (RIBO-) RIBOZYME PHARM INC.

XX (BLAT/) BLATT L.

XX (MCSW/) MCSWIGGEN J.

XX (CHOW/) CHOWIRA B M.

XX Blatt L, Mcswiggen J, Chowira BM;

XX WPI; 2001-607195/69.

XX Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense

XX constructs, which down regulate expression of a CD20 gene or neurite

XX growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and

XX central nervous system injury.

XX Claim 30; Page 142; 200pp; English.

XX The invention relates to a nucleic acid molecule which down regulates

XX expression of a CD20 gene and a nucleic acid molecule which down

XX regulates expression of a neurite growth inhibitor gene (NOGO). The

XX nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a

XX DNzyme) an inozyme (an endolytic nucleic acid cleaving a RNA molecule

XX possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr

XX an amberzyme (cleaving RNA with an NGN triplet), a zinczyme (cleaving RNA

XX with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA

XX of CD20 in the presence of a divalent cation that is preferably Mg²⁺.

XX Furthermore, it may be contacted with a cell to reduce CD20 activity of

XX the cell and treat a patient having a condition associated with the level

XX of CD20. The treatment may further comprise the use of one or more

XX therapies. In particular, the CD20 targeting nucleic acid may be used to

XX treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-

XX Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic

XX leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell

XX lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,

XX immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-

XX targeting nucleic acid is used to cleave RNA of the NOGO gene in the

XX presence of a divalent cation that is preferably Mg²⁺. Furthermore, the

XX nucleic acid may be contacted with a cell to reduce NOGO activity of the

XX cell and treat a patient having a condition associated with the level of

XX NOGO. The treatment may further comprise the use of one or more

XX therapies. In particular, the NOGO-targeting nucleic acid may be used to

XX treat central nervous system (CNS) injury and cerebrovascular accident

XX (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),

XX chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),

XX parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob

XX disease, muscular dystrophy, and/or other neurodegenerative disease

XX states which respond to the modulation of NOGO expression. The present

XX invention is a hammerhead ribozyme of the invention

XX

Sequence 17 BP; 1 A; 5 C; 2 G; 0 T; 9 U; 0 Other;

XX

Query Match 16.2%; Score 11.8; DB 1; Length 17;

Best Local Similarity 33.3%; Pred. No. 6.3e+02;

Matches 5; Conservative 8; Mismatches 2; Indels 0; Gaps 0;

QY 915 TGGTCTTTCCTTT 929

Db 2 UGAUCUUGCCUUCU 16

RESULT 177

ABV83094/c

XX ID ABV83094 standard; DNA; 17 BP.

```
1 ABV83094;
2
3 03-JAN-2003 (first entry)
4
5 Human HTPL scanning oligonucleotide SEQ ID 4340.
6
7 Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
8 human testis expressed Patched like protein; testis; adrenal; liver;
9 male germ cell development; bone marrow; brain; kidney; lung; placenta;
10 prostate; skeletal muscle; colon; male infertility; cancer; ss.
11
12 Homo sapiens.
13
14 EP1229046-A2.
15
16 07-AUG-2002.
17
18 28-JAN-2002; 2002EP-00001167.
19
20 30-JAN-2001; 2001WO-US000663.
21 30-JAN-2001; 2001WO-US000664.
22 30-JAN-2001; 2001WO-US000665.
23 30-JAN-2001; 2001WO-US000667.
24 30-JAN-2001; 2001WO-US000668.
25 30-JAN-2001; 2001WO-US000669.
26 23-MAY-2001; 2001US-00864761.
27 09-OCT-2001; 2001US-0327898P.
28
29 (AEOM-) AEOMICA INC.
30
31 Zhan J;
32
33 WPI; 2002-676582/73.
34
35 Novel isolated human testis expressed Patched like protein (HTPL), useful
36 for identifying agonist and antagonist and specific binding partners, and
37 for treating subjects having defects in HTPL.
38
39 Example 2; Page 632; 718pp; English.
40
41 The present invention relates to human testis expressed Patched like
42 protein (HTPL), see ABV78759 to ABV78762 and AB98519 to AB98520). HTPL
43 has two isoforms, with a few single base pair differences between the
44 two. One of the single base pair changes introduces a premature stop
45 codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
46 shares an overall structure organisation with the Patched protein. The
47 shared structural features strongly imply that HTPL plays a role similar
48 to that of Patched, and is a potential tumour suppressor. HTPL is
49 important in regulating male germ cell development, and the HTPL gene was
50 mapped to human chromosome 10p12.1. HTPL and its coding sequence are
51 useful for diagnosing a disorder caused by mutation in HTPL, and in
52 therapy and manufacture of a medicament for treatment or prevention of
53 such disorder associated with decreased expression or activity of human
54 HTPL. Such disorders include disorders of testis, or adrenal, adult and
55 foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
56 skeletal muscle or colon function. HTPL proteins and nucleic acids are
57 clinically useful diagnostic markers and potential therapeutic agents for
58 male infertility and cancer. The present oligonucleotide was used in an
59 example from the invention
60
61 Sequence 17 BP; 9 A; 4 C; 2 G; 2 T; 0 U; 0 Other;
62
63 Query Match 16.2%; Score 11.8; DB 1; Length 17;
64 Best Local Similarity 86.7%; Pred. No. 6.3e+02;
65 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
66
67 915 TGGTCTTTTGGCTTTT 929
68 |||||
69 17 TGGTCTTTGACTGT 3
70
71 RESULT 178
72 3260689
```

```
ID ABZ60689 standard; RNA; 17 BP.
XX AC
XX ABZ60689;
XX
XX 21-MAR-2003 (first entry)
XX
XX Human K-Ras DNazyme substrate #801.
DE DE
XX Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytosstatic; anti-HIV;
KW anti-rheumatic; cancer; AIDS; ss.
XX
XX Homo sapiens.
XX
XX WO200297114-A2.
XX
XX 05-DEC-2002.
XX
XX 29-MAY-2002; 2002WO-US016840.
XX
XX 29-MAY-2001; 2001US-0294140P.
PR
XX 06-JUN-2001; 2001US-0296249P.
PR
XX 10-SEP-2001; 2001US-0318471P.
PR
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX Mcswiggen J;
XX
XX WPI; 2003-140484/13.
XX
XX Novel short interfering RNA and enzymatic nucleic acid useful for
PT treating cancer, modulates the expression of a nucleic acid encoding
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
XX Claim 58; Page 100; 185pp; English.
XX
XX The invention relates to a novel short interfering RNA (siRNA) nucleic
CC acid molecule or an enzymatic nucleic acid molecule, that modulates
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC acid molecule of the invention has cytosstatic, anti-HIV, and anti-
CC rheumatic activity. The nucleic acid molecules are useful for reducing
CC HER2, K-Ras, and HIV activity in a cell. The nucleic acids are
CC also useful for treating breast, ovarian, colorectal, lung, prostate,
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC ABZ66530 - ABZ66595 represent substrate/target sequences for the human
CC ribozymes of the invention
XX
XX Sequence 17 BP; 4 A; 3 C; 1 G; 0 T; 9 U; 0 Other;
SQ
Query Match 16.2%; Score 11.8; DB 1; Length 17;
Best Local Similarity 40.0%; Pred. No. 6.3e+02;
Matches 6; Conservative 7; Mismatches 2; Indels 0; Gaps 0;
QY 937 CTCCTCATGCTTTA 951
Db 3 CACUUCUUGUUUUA 17
|::|::|::|
|::|::|::|
RESULT 179
AAA55643/C
ID AAA55643 standard; DNA; 18 BP.
XX
XX AAA55643;
XX
XX 30-AUG-2000 (first entry)
DT
XX TRAF5 antisense oligonucleotide ISIS# 26943.
DE
XX Tumour necrosis factor receptor-associated factor; TRAF; human;
KW antisense oligonucleotide; phosphorothioate; antiproliferative;
KW anti-inflammatory; E-selectin; jun kinase; ss.
```

```

XX O3 Synthetic.
XX PN WO200020435-A1.
XX PD 13-APR-2000.
XX PP 05-OCT-1999; 99WO-US023171.
XX PR 06-OCT-1998; 98US-00167109.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Baker BF, Cowsert LM, Monia BP, Xu XS;
XX DR WPI; 2000-303732/26.
XX XX Antisense oligonucleotides targeted to nucleic acids encoding human tumor
PT necrosis factor receptor-associated factor (TRAF), useful for treating
PT diseases associated with TRAF expression such as inflammatory diseases.
XX Example 21; Page 65; 170pp; English.
XX The present invention relates to antisense oligonucleotides (see AAA55496
CC -A55757) which are targeted to nucleic acids encoding a human tumour
CC necrosis factor receptor-associated factor (TRAF). The antisense
CC sequences comprise at least one modified internucleotide linkage, which
CC is a phosphorothioate linkage. The oligonucleotides also include at least
CC one modified sugar moiety such as a 2'-O-methoxyethyl sugar moiety.
CC Sequences AAA55490-A55495 represent nucleotide sequences encoding human
CC TRAF1-6. Included in the invention is a method for treating a human
CC having a disease associated with the expression of TRAF comprising
CC administering an antisense oligonucleotide. The reduction of Jun kinase
CC activation in cells comprises contacting the cells with an antisense
CC oligonucleotide targeted to TRAF-6. A method for the reduction of E-
CC selectin expression in cells or tissues comprises contacting the cells or
CC tissues with an antisense oligonucleotide targeted to TRAF-2 or TRAF-6.
CC The antisense oligonucleotides have antiproliferative and anti-
CC inflammatory activity and are useful for treating disorders associated
CC with cell proliferation and inflammation. The antisense oligonucleotides
CC may also be used as a diagnostic probe for studying gene function
XX SQ Sequence 18 BP; 8 A; 3 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 16.2%; Score 11.8; DB 1; Length 18;
Best Local Similarity 86.7%; Pred. No. 6.5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 909 TTTCTTTGGTCTTGG 923
DB 16 TTTCTTTGGACTTGG 2

RESULT 180
AAZ72264
ID AAZ72264 standard; DNA; 18 BP.
XX AC AAZ72264;
XX 10-SEP-2001 (first entry)
XX Human biallelic marker upstream amplification primer SEQ ID NO:6620.
XX Human genome; biallelic marker; high density disequilibrium map;
XX genomic map; haplotype; phenotype; polymorphic base; genotyping;
XX haplotyping; hybridisation; identification; characterisation;
XX amplification; single nucleotide polymorphism; SNP; PCR primer;
XX diagnosis; ss.
XX Homo sapiens.
XX WO954500-A2.
XX

```

```

PD 28-OCT-1999.
XX 21-APR-1999; 99WO-IB000822.
XX 21-APR-1998; 98US-0082614P.
XX 23-NOV-1998; 98US-0109732P.
XX (GEST ) GENSET.
XX Cohen D, Blumenfeld M, Chumakov I;
XX WPI; 2000-013267/01.
XX Novel biallelic markers used to construct a high density disequilibrium
PT map of the human genome.
XX Claim 9; Page 1642; 2745pp; English.
XX AAZ65654 to AAZ69578 represent human biallelic markers from the present
CC invention, which contain a polymorphic base at position 24 of their
CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
CC primers for the biallelic markers. The biallelic markers of the invention
CC have a variety of uses: they can be used for high density mapping of the
CC human genome, and in complex association studies and haplotyping studies
CC which are useful in determining the genetic basis for disease states.
CC Compositions and methods of the invention can also be useful for the
CC identification of the targets for the development of pharmaceutical
CC agents and diagnostic methods, as well as the characterisation of the
CC differential efficacious responses to and side effects from
CC pharmaceutical agents acting on a disease as well as other treatment.
CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
CC 3367, are not actually given a sequence in the Sequence Listing from the
CC present invention
XX SQ Sequence 18 BP; 4 A; 2 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 16.2%; Score 11.8; DB 1; Length 18;
Best Local Similarity 86.7%; Pred. No. 6.5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 903 GGTCAATTTCTTGG 917
DB 4 GGACATTTTCATTGG 18

RESULT 181
AAA92572
ID AAA92572 standard; DNA; 18 BP.
XX AC AAA92572;
XX 04-JAN-2001 (first entry)
XX Antisense oligonucleotide ISIS# 30282.
XX Human; SRA; steroid receptor RNA activator; cytostatic; antiinflammatory;
XX SRA inhibitor; cancer; infection; antisense oligonucleotide; ss.
XX Synthetic.
XX US6107092-A.
XX 22-AUG-2000.
XX 29-MAR-1999; 99US-00280409.
XX 29-MAR-1999; 99US-00280409.
XX (ISIS-) ISIS PHARM INC.
XX (BAYU ) BAYLOR COLLEGE MEDICINE.
XX Cowsert LM, Bennett CF, O'malley BW;
XX

```

WPI; 2000-586211/55.

Antisense compounds targeted to steroid receptor RNA activator useful for diagnosis, prophylaxis and treatment of diseases associated with the steroid activator, such as infection, inflammation or tumor formation.

Claim 3; Col 41; 47pp; English.

The present sequence is one of a large number of antisense oligonucleotides which is directed against one of four human steroid receptor RNA activator (SRA) nucleic acid sequences. Two series of antisense oligonucleotides were synthesised. The first series comprised 8 -30 oligodeoxynucleotides with a phosphorothioate backbone. The second series comprised chimeric oligonucleotides composed of a central gap region, consisting of ten 2'-deoxynucleotides, which was flanked on both sides by four-nucleotide wings. The wings were composed of 2'-methoxyethyl (2'-MOE) nucleotides. Both series contained the same nucleotide sequences. The antisense compounds are useful for research, diagnosis, treatment and prophylaxis to prevent or delay infection, inflammation or tumour formation. Therapeutically the oligonucleotides are highly safe and are effectively administered to humans

Sequence 18 BP; 1 A; 5 C; 3 G; 9 T; 0 U; 0 Other;

Query Match 16.2%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 6.5e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

935 TCCTCTTCATTCGTT 949
 |||||
 2 TTCTCTTCATTCGCT 16

RESULT 182
 ABZ10580
 ABZ10580 standard; DNA; 18 BP.

ABZ10580;
 16-JAN-2003 (first entry)

Haematopoietic cell proliferation disorder related oligonucleotide #720.

Human; haematopoietic cell proliferation disorder; cytostatic;
 gene therapy; lymphocytic leukaemia; acute myelogenous leukaemia;
 cytosine methylation state; probe; primer; ss.

Homo sapiens.
 Synthetic.

WO200277272-A2.
 03-OCT-2002.

26-MAR-2002; 2002WO-EP003401.

26-MAR-2001; 2001US-0278333P.

(EPIG-) EPIGENOMICS AG.

Berlin K, Braun A, Distler J, Guetig D, Howe A, Mueller J;
 Olek A, Piepenbrock C, Adorjan P, Grabs G, Lesche R, Leu E;
 Lewin A, Lipscher E, Maier S, Model F, Mueller V, Otto T, Pelet C;
 Schwöpe I, Ziebarth H;
 WPI; 2003-018942/01.

Detecting and differentiating between hematopoietic cell proliferative disorders, comprises contacting a target nucleic acid with a reagent that distinguishes between methylated and non-methylated CpG dinucleotides.

Claim 15; Page 51; 117pp; English.

The present invention describes a method for detecting and differentiating between haematopoietic cell proliferative disorders associated with at least 1 gene and/or their regulatory regions in a subject. The method comprises contacting a target nucleic acid in a biological sample obtained from the subject with at least 1 reagent, which distinguishes between methylated and non-methylated CpG dinucleotides within the target nucleic acid. ABZ09861 to ABZ11118 represent specifically claimed nucleotide sequences from the present invention. Oligonucleotides from the present invention can be used; for differentiating between healthy haematopoietic cells and proliferative disorder haematopoietic cells; for differentiating between acute lymphocytic leukaemia and acute myelogenous leukaemia; as probes for determining the cytosine methylation state and/or single nucleotide polymorphisms (SNPs) of haematopoietic cell proliferation disorder related sequences and their complements; and as primers for the amplification of haematopoietic cell proliferation disorder related DNA sequences. The nucleotide sequences from the present invention can also be used for detecting a predisposition to, differentiation between CC subclasses, diagnosis, prognosis, treatment and/or monitoring of CC haematopoietic cell proliferative disorders. The present method enables a highly specific classification of haematopoietic cell proliferative disorders allowing for improved and informed treatment of patients

XX
 SQ Sequence 18 BP; 5 A; 0 C; 3 G; 10 T; 0 U; 0 Other;

Query Match 16.2%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 6.5e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 945 TCGTTTAATGATCG 959
 |||||
 1 TTGTTTAATGATG 15

Db

RESULT 183
 ABZ10579
 ABZ10579 standard; DNA; 18 BP.

ABZ10579;
 16-JAN-2003 (first entry)

Haematopoietic cell proliferation disorder related oligonucleotide #719.

Human; haematopoietic cell proliferation disorder; cytostatic;
 gene therapy; lymphocytic leukaemia; acute myelogenous leukaemia;
 cytosine methylation state; probe; primer; ss.

Homo sapiens.
 Synthetic.

WO200277272-A2.
 03-OCT-2002.

26-MAR-2002; 2002WO-EP003401.

26-MAR-2001; 2001US-0278333P.

(EPIG-) EPIGENOMICS AG.

Berlin K, Braun A, Distler J, Guetig D, Howe A, Mueller J;
 Olek A, Piepenbrock C, Adorjan P, Grabs G, Lesche R, Leu E;
 Lewin A, Lipscher E, Maier S, Model F, Mueller V, Otto T, Pelet C;
 Schwöpe I, Ziebarth H;
 WPI; 2003-018942/01.

Detecting and differentiating between hematopoietic cell proliferative disorders, comprises contacting a target nucleic acid with a reagent that distinguishes between methylated and non-methylated CpG dinucleotides.

Claim 15; Page 51; 117pp; English.

XX The present invention describes a method for detecting and
 CC differentiating between haematopoietic cell proliferative disorders
 CC associated with at least 1 gene and/or their regulatory regions in a
 CC subject. The method comprises contacting a target nucleic acid in a
 CC biological sample obtained from the subject with at least 1 reagent,
 CC which distinguishes between methylated and non-methylated CpG
 CC dinucleotides within the target nucleic acid. ABZ09861 to ABZ11118
 CC represent specifically claimed nucleotide sequences from the present
 CC invention. Oligonucleotides from the present invention can be used: for
 CC differentiating between healthy haematopoietic cells and proliferative
 CC disorder haematopoietic cells; for differentiating between acute
 CC lymphocytic leukaemia and acute myelogenous leukaemia; as probes for
 CC determining the cytosine methylation state and/or single nucleotide
 CC polymorphisms (SNPs) of haematopoietic cell proliferation disorder
 CC related sequences and their complements; and as primers for the
 CC amplification of haematopoietic cell proliferation disorder related DNA
 CC sequences. The nucleotide sequences from the present invention can also
 CC be used for detecting a predisposition to, differentiation between
 CC subclasses, diagnosis, prognosis, treatment and/or monitoring of
 CC haematopoietic cell proliferative disorders. The present method enables a
 CC highly specific classification of haematopoietic cell proliferative
 CC disorders allowing for improved and informed treatment of patients
 XX

SQ Sequence 18 BP; 5 A; 2 C; 3 G; 8 T; 0 U; 0 Other;
 Query Match 16.2%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 6.5e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

CY 945 TGGTTTAAATGATGTCG 959
 | | | | | | | | | |
 Db 1 TTGTTTAAATGATGTCG 15

RESULT 184
 ADC70095
 ID ADC70095 standard; DNA; 18 BP.
 AC ADC70095;
 XX
 XX 18-DEC-2003 (first entry)
 XX
 XX Primer oligo used for analysing CpG islands in genomic DNA (SeqID 585).
 XX PCR; primer; ss; lung cell proliferative disorder; CpG dinucleotide;
 KW adenocarcinoma; squamous cell carcinoma; cytosine methylation state;
 KW cytosine methylation state.
 XX
 XX Unidentified.
 XX WO2003052135-A2.
 XX 26-JUN-2003.
 XX 10-DEC-2002; 2002WO-EP014026.
 XX 14-DEC-2001; 2001DE-01061625.
 XX (EPIG-) EPIGENOMICS AG.
 XX Burger M, Field JK, Genc B, Liloglou T, Lipscher E, Maier S;
 PI Nimmrich I;
 XX WPI; 2003-533029/50.
 XX
 XX Detecting and differentiating cytosine methylation state of genomic DNA,
 PT useful for diagnosing, treating prognosticating and/or monitoring lung
 PT cell proliferative disorders e.g. adenocarcinoma and squamous cell
 PT carcinoma.
 XX
 XX Claim 15; SEQ ID NO 585; 58pp; English.

CC This invention relates to a novel method for detecting and
 CC differentiating between lung cell proliferative disorders associated with
 CC at least one gene and/or their regulatory regions. Specifically, it
 CC refers to a method comprising contacting a target nucleic acid in a
 CC biological sample with at least one reagent, wherein the reagent is able
 CC to distinguish between methylated and non-methylated CpG dinucleotides
 CC present in the target DNA. As such, it is possible to further
 CC differentiate and diagnose medical conditions including adenocarcinoma
 CC and squamous cell carcinoma, and their respective adjacent lung tissue.
 CC The present invention describes cytosine methylation state of genomic DNA,
 CC that are useful as probes for determining the cytosine methylation state
 CC or single nucleotide polymorphisms (SNPs) of the target sequence. This
 CC oligonucleotide sequence is a primer oligomer used for the analysis of
 CC CpG positions within genomic DNA, used in an exemplification of the
 CC invention.
 XX

SQ Sequence 18 BP; 5 A; 0 C; 3 G; 10 T; 0 U; 0 Other;
 Query Match 16.2%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 6.5e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

CY 945 TGGTTTAAATGATGTCG 959
 | | | | | | | | | |
 Db 1 TTGTTTAAATGATGTCG 15

RESULT 185
 ADC70094
 ID ADC70094 standard; DNA; 18 BP.
 AC ADC70094;
 XX
 XX 18-DEC-2003 (first entry)
 XX
 XX Primer oligo used for analysing CpG islands in genomic DNA (SeqID 584).
 XX PCR; primer; ss; lung cell proliferative disorder; CpG dinucleotide;
 KW adenocarcinoma; squamous cell carcinoma; cytosine methylation state;
 KW cytosine methylation state.
 XX
 XX Unidentified.
 XX WO2003052135-A2.
 XX 26-JUN-2003.
 XX 10-DEC-2002; 2002WO-EP014026.
 XX 14-DEC-2001; 2001DE-01061625.
 XX (EPIG-) EPIGENOMICS AG.
 XX Burger M, Field JK, Genc B, Liloglou T, Lipscher E, Maier S;
 PI Nimmrich I;
 XX WPI; 2003-533029/50.
 XX
 XX Detecting and differentiating cytosine methylation state of genomic DNA,
 PT useful for diagnosing, treating prognosticating and/or monitoring lung
 PT cell proliferative disorders e.g. adenocarcinoma and squamous cell
 PT carcinoma.
 XX
 XX Claim 15; SEQ ID NO 584; 58pp; English.

CC This invention relates to a novel method for detecting and
 CC differentiating between lung cell proliferative disorders associated with
 CC at least one gene and/or their regulatory regions. Specifically, it
 CC refers to a method comprising contacting a target nucleic acid in a
 CC biological sample with at least one reagent, wherein the reagent is able
 CC to distinguish between methylated and non-methylated CpG dinucleotides
 CC present in the target DNA. As such, it is possible to further
 CC differentiate and diagnose medical conditions including adenocarcinoma
 CC and squamous cell carcinoma, and their respective adjacent lung tissue.
 CC The present invention describes cytosine methylation state of genomic DNA,
 CC that are useful as probes for determining the cytosine methylation state
 CC or single nucleotide polymorphisms (SNPs) of the target sequence. This
 CC oligonucleotide sequence is a primer oligomer used for the analysis of
 CC CpG positions within genomic DNA, used in an exemplification of the
 CC invention.
 XX

and squamous cell carcinoma, and their respective adjacent lung tissue.
The present invention describes cytosstatic oligomers and PNA-oligomers
that are useful as probes for determining the cytosine methylation state
or single nucleotide polymorphisms (SNPs) of the target sequence. This
oligonucleotide sequence is a primer oligomer used for the analysis of
CpG positions within genomic DNA, used in an exemplification of the
invention.

Sequence 18 BP; 5 A; 2 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 16.2%; Score 11.8; DB 1; Length 18;

Best Local Similarity 86.7%; Pred. No. 6.5e+02;

Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

945 TGGTTTAATGATCG 959

1 TTTGTTTACGATCG 15

RESULT 186

DE84422

ADE84422 standard; DNA; 18 BP.

ADE84422;

29-JAN-2004 (first entry)

Human lymphoid cell proliferative disorder gene CpG analysis oligo #128.

lymphoid cell proliferative disorder; methylation;

methyated CpG dinucleotide; single nucleotide polymorphism; SNP;

diffuse large B-cell lymphoma; mantle cell lymphoma;

chronic lymphocytic leukemia; small lymphocytic lymphoma;

follicular lymphoma; diagnosis; prognosis; primer; ss.

Homo sapiens.

WO2003044226-A2.

30-MAY-2003.

25-NOV-2002; 2002WO-EP013265.

23-NOV-2001; 2001DE-01057491.

28-DEC-2001; 2001DE-01064501.

(EPIG-) EPIGENOMICS AG.

Burger M, Caldwell C, Genc B, Becker E, Maier S, Nimmrich I;

WPI; 2003-457621/43.

Detecting and differentiating between lymphoid cell proliferative
disorders comprises contacting a target nucleic acid with at least one
reagent that distinguishes between methylated and non-methylated CpG
dinucleotides.

Claim 30; SEQ ID NO 418; 448pp; English.

The invention relates to a method of detecting and differentiating
between lymphoid cell proliferative disorders associated with at least
one gene and/or their regulatory regions in a subject by contacting a
target nucleic acid in a biological sample obtained from the subject with
at least one reagent or series of reagents that distinguish between
methylated and non-methylated CpG dinucleotides within the target nucleic
acid. The genes and/or their regulatory regions are preferably selected
from MDR1, CSNK2B, EGR4, AR, CDK4, RB2, CDC25A, GP1b beta, MYOD1, CDH3,
MYC11, ELK1, ABL1, APC, BCL2, CDH1, CDKN1A, CDKN2a, CDKN2B, FOS,
GSTP1, HIC-1, MGMT, MLH1, MOS, MYC, PTEN, RBL2, TGFBR2, TP73, CDKNIC,
GSK3beta, ESRI, APAF1, BAK1, BAX or HOXA5. Oligomers, peptide nucleic
acid (PNA)-oligomers and/or isolated nucleic acids based on the sequences
of the genes are useful for detecting the methylation state of all the
CpG dinucleotides within one or more the sequences, or their complements,

for determining the cytosine methylation state and or single nucleotide
polymorphisms (SNPs), and for differentiating at least two of the medical
conditions such as diffuse large B-cell lymphoma, mantle cell lymphoma,
chronic lymphocytic leukemia, small lymphocytic lymphoma and follicular
lymphoma. They are also useful for detecting of a predisposition to,
differentiation between subclasses, diagnosis, prognosis, treating and/or
monitoring of lymphoid cell proliferative disorder. This sequence
represents an oligonucleotide used to analyse of CpG positions within the
above mentioned genes.

Sequence 18 BP; 5 A; 0 C; 3 G; 10 T; 0 U; 0 Other;

Query Match 16.2%; Score 11.8; DB 1; Length 18;

Best Local Similarity 86.7%; Pred. No. 6.5e+02;

Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

945 TGGTTTAATGATCG 959

1 TTTGTTTAATGATG 15

RESULT 187

ADE84421

ADE84421 standard; DNA; 18 BP.

ADE84421;

29-JAN-2004 (first entry)

Human lymphoid cell proliferative disorder gene CpG analysis oligo #127.

lymphoid cell proliferative disorder; methylation;

methyated CpG dinucleotide; single nucleotide polymorphism; SNP;

diffuse large B-cell lymphoma; mantle cell lymphoma;

chronic lymphocytic leukemia; small lymphocytic lymphoma;

follicular lymphoma; diagnosis; prognosis; primer; ss.

Homo sapiens.

WO2003044226-A2.

30-MAY-2003.

25-NOV-2002; 2002WO-EP013265.

23-NOV-2001; 2001DE-01057491.

28-DEC-2001; 2001DE-01064501.

(EPIG-) EPIGENOMICS AG.

Burger M, Caldwell C, Genc B, Becker E, Maier S, Nimmrich I;

WPI; 2003-457621/43.

Detecting and differentiating between lymphoid cell proliferative
disorders comprises contacting a target nucleic acid with at least one
reagent that distinguishes between methylated and non-methylated CpG
dinucleotides.

Claim 30; SEQ ID NO 417; 448pp; English.

The invention relates to a method of detecting and differentiating
between lymphoid cell proliferative disorders associated with at least
one gene and/or their regulatory regions in a subject by contacting a
target nucleic acid in a biological sample obtained from the subject with
at least one reagent or series of reagents that distinguish between
methylated and non-methylated CpG dinucleotides within the target nucleic
acid. The genes and/or their regulatory regions are preferably selected
from MDR1, CSNK2B, EGR4, AR, CDK4, RB2, CDC25A, GP1b beta, MYOD1, CDH3,
MYC11, ELK1, ABL1, APC, BCL2, CDH1, CDKN1A, CDKN2a, CDKN2B, FOS,
GSTP1, HIC-1, MGMT, MLH1, MOS, MYC, PTEN, RBL2, TGFBR2, TP73, CDKNIC,
GSK3beta, ESRI, APAF1, BAK1, BAX or HOXA5. Oligomers, peptide nucleic
acid (PNA)-oligomers and/or isolated nucleic acids based on the sequences

CC of the genes are useful for detecting the methylation state of all the
 CC CpG dinucleotides within one or more the sequences, or their complements,
 CC for determining the cytosine methylation state and/or single nucleotide
 CC polymorphisms (SNPs), and for differentiating at least two of the medical
 CC conditions such as diffuse large B-cell lymphoma, mantle cell lymphoma,
 CC chronic lymphocytic leukemia, small lymphocytic lymphoma and follicular
 CC lymphoma. They are also useful for detecting of a predisposition to,
 CC differentiation between subclasses, diagnosis, prognosis, treating and/or
 CC monitoring of lymphoid cell proliferative disorder. This sequence
 CC represents an oligonucleotide used to analyse of CpG positions within the
 CC above mentioned genes.
 XX
 SQ Sequence 18 BP; 5 A; 2 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 16.2%; Score 11.8; DB 1; Length 18;
 Best Local Similarity 86.7%; Pred. No. 6.5e+02;
 Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

CY 945 TGGTTTAAATGATCG 959
 DB 1 TTGTTTACGTATCG 15

RESULT 188
 AAQ40484/C
 ID AAQ40484 standard; DNA; 17 BP.

XX AAQ40484;

XX 29-JUL-1993 (first entry)

DE PCR primer for the proctase B gene.

XX Precursor; cloning; trypsin; amplification; ss.

XX Synthetic.

XX JP05068570-A.

XX 23-MAR-1993.

XX 12-SEP-1991; 91JP-00260569.

XX 12-SEP-1991; 91JP-00260569.

XX (MEIJ) MEIJI SEIKA KAISHA.

XX WPI; 1993-130642/16.

XX Proctase B gene for commercial use - encodes specified aminoacid
 PT sequence.

XX Disclosure; Page 7; 10pp; Japanese.

XX Trypsin digest fragments of purified proctase B were used to design PCR
 CC primers for cloning of the proctase B gene. A cDNA library was prepd.
 CC from Aspergillus niger and a DNA primer synthesised. A specific DNA probe
 CC was amplified from the template library by PCR and the proctase B gene
 CC cloned into E. coli HB101 for expression of the proctase B precursor. See
 CC also AAQ40483-9

SQ Sequence 17 BP; 8 A; 1 C; 4 G; 0 T; 0 U; 4 Other;

Query Match 15.9%; Score 11.6; DB 1; Length 17;
 Best Local Similarity 68.8%; Pred. No. 6.8e+02;
 Matches 11; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

CY 935 TCCCTTCATTCGTTT 950
 DB 17 TCCCTCTCTTCTTTT 2

RESULT 189

ACC64682
 ID ACC64682 standard; DNA; 17 BP.
 XX
 AC ACC64682;
 XX
 DT 01-JUL-2003 (first entry)
 XX
 DE Murine oligonucleotide associated with tumour suppression, SEQ ID 1929.
 XX
 KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;
 KW tumour suppression; tumour reversion; apoptosis; virus resistance;
 KW viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
 KW schizophrenia; ss.
 XX
 OS Mus musculus.
 XX
 PN WO2003025176-A2.
 XX
 PD 27-MAR-2003.
 XX
 PF 17-SEP-2002; 2002WO-IB004210.
 XX
 PR 17-SEP-2001; 2001FR-00011979.
 XX
 PA (MOLE-) MOLECULAR ENGINES LAB.
 XX
 PI Telerman A, Amson R, Tuijnder M;
 XX
 DR WPI; 2003-333167/31.
 XX
 XX New isolated nucleic acid, useful for treating viral diseases associated
 PT with tumors and cell degeneration, also related polypeptides, antibodies
 PT and transfected cells.
 XX
 PS Disclosure; Page 256; 738pp; French.
 XX
 CC The present invention relates to murine oligonucleotides (ACC62754-
 CC ACC68806), which are associated with tumour suppression, tumour
 CC reversion, apoptosis and virus resistance. The oligonucleotides are
 CC useful as (1) as probes and primers for detecting, identifying,
 CC quantifying and/or amplifying nucleic acid, e.g. as one component of a
 CC gene chip; in vitro as (anti)sense reagents; and (2) for production of
 CC recombinant polypeptides. The oligonucleotides are useful for preparation
 CC of pharmaceuticals for prevention and/or treatment of viral diseases that
 CC are characterised by development of tumours or cell degeneration,
 CC specifically cancer but also Alzheimer's disease and schizophrenia
 XX
 SQ Sequence 17 BP; 1 A; 4 C; 2 G; 9 T; 0 U; 1 Other;
 Query Match 15.9%; Score 11.6; DB 1; Length 17;
 Best Local Similarity 91.7%; Pred. No. 6.8e+02;
 Matches 11; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 CY 918 TCTTTGCTTTT 929
 DB 6 TCTWTGCTTTT 17
 RESULT 190
 ABC25843/C
 ID ABC25843 standard; DNA; 13 BP.
 XX
 AC ABC25843;
 XX
 DT 20-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 25860 for detecting SNP TSC0006595.
 XX
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.

```

1 WO200177384-A2.
2
3 18-OCT-2001.
4
5 06-APR-2001; 2001WO-IB000713.
6
7 07-APR-2000; 2000DE-01019173.
8 (EPIG-) EPIGENOMICS AG.
9 Olek A, Piepenbrock C, Berlin K;
10 WPI; 2001-657177/75.
11
12 Set of oligonucleotides, useful for diagnosis and cell typing, is
13 designed to detect single-nucleotide polymorphisms and cytosine
14 methylation status.
15
16 Claim 1; SEQ ID NO 25860; 29pp + Sequence Listing; German.
17
18 This invention describes novel oligonucleotide primers or peptide nucleic
19 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
20 and cytosine methylation status in chemically pretreated genomic DNA. The
21 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
22 range of diseases including immune system, gastrointestinal, respiratory,
23 central nervous system, cardiovascular and metabolic disorders. The
24 oligomers are also used for detecting cell type differentiation. ABC00010
25 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
26 represent the oligomers described in the invention. NOTE: The sequence
27 data for this patent did not form part of the printed specification, but
28 was obtained in electronic format from WIPO at
29 ftp.wipo.int/pub/published_pct_sequences
30
31 Sequence 13 BP; 8 A; 2 C; 0 G; 3 T; 0 U; 0 Other;
32
33 This invention describes novel oligonucleotide primers or peptide nucleic
34 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
35 and cytosine methylation status in chemically pretreated genomic DNA. The
36 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
37 range of diseases including immune system, gastrointestinal, respiratory,
38 central nervous system, cardiovascular and metabolic disorders. The
39 oligomers are also used for detecting cell type differentiation. ABC00010
40 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
41 represent the oligomers described in the invention. NOTE: The sequence
42 data for this patent did not form part of the printed specification, but
43 was obtained in electronic format from WIPO at
44 ftp.wipo.int/pub/published_pct_sequences
45
46 Query Match 15.6%; Score 11.4; DB 1; Length 13;
47 Best Local Similarity 92.3%; Pred. NO. 6.2e+02;
48 Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
49
50 940 TTGTTGTTTAA 952
51 |||||
52 13 TTATGTTTAA 1
53
54 RESULT 191
55 ABC35597/c
56 ABC35597 standard; DNA; 13 BP.
57
58 ABC35597;
59
60 20-FEB-2002 (first entry)
61
62 Oligonucleotide SEQ ID NO 35614 for detecting SNP TSC0011256.
63
64 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
65 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
66 central nervous system; gastrointestinal; respiratory; immune; metabolic.
67
68 Homo sapiens.
69
70 WO200177384-A2.
71
72 18-OCT-2001.
73
74 06-APR-2001; 2001WO-IB000713.
75
76 07-APR-2000; 2000DE-01019173.
77 (EPIG-) EPIGENOMICS AG.
78 Olek A, Piepenbrock C, Berlin K;
79 WPI; 2001-657177/75.
80
81 Set of oligonucleotides, useful for diagnosis and cell typing, is
82 designed to detect single-nucleotide polymorphisms and cytosine
83 methylation status.
84
85 Claim 1; SEQ ID NO 133000; 29pp + Sequence Listing; German.
86
87 This invention describes novel oligonucleotide primers or peptide nucleic
88 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
89 and cytosine methylation status in chemically pretreated genomic DNA. The
90 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
91 range of diseases including immune system, gastrointestinal, respiratory,
92 central nervous system, cardiovascular and metabolic disorders. The
93 oligomers are also used for detecting cell type differentiation. ABC00010
94 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
95 represent the oligomers described in the invention. NOTE: The sequence
96 data for this patent did not form part of the printed specification, but
97 was obtained in electronic format from WIPO at
98 ftp.wipo.int/pub/published_pct_sequences
99
100 Query Match 15.6%; Score 11.4; DB 1; Length 13;
101 Best Local Similarity 92.3%; Pred. NO. 6.2e+02;
102 Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
103
104 944 TTGTTTAAATGTA 956
105 |||||
106 13 TTGTTTAAATGTA 1
107
108 RESULT 192
109 ABF33003
110 ID ABF33003 standard; DNA; 13 BP.
111
112 AC ABF33003;
113
114 XX 21-FEB-2002 (first entry)
115
116 DE Oligonucleotide SEQ ID NO 133000 for detecting SNP TSC0033182.
117
118 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
119 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
120 central nervous system; gastrointestinal; respiratory; immune; metabolic.
121
122 OS Homo sapiens.
123
124 XX WO200177384-A2.
125
126 PD 18-OCT-2001.
127
128 PF 06-APR-2001; 2001WO-IB000713.
129
130 PR 07-APR-2000; 2000DE-01019173.
131
132 PA (EPIG-) EPIGENOMICS AG.
133
134 PI Olek A, Piepenbrock C, Berlin K;
135
136 XX WPI; 2001-657177/75.
137
138 PT Set of oligonucleotides, useful for diagnosis and cell typing, is
139 designed to detect single-nucleotide polymorphisms and cytosine
140 methylation status.
141
142 PS Claim 1; SEQ ID NO 133000; 29pp + Sequence Listing; German.
143
144 This invention describes novel oligonucleotide primers or peptide nucleic
145 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
146 and cytosine methylation status in chemically pretreated genomic DNA. The
147 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
148 range of diseases including immune system, gastrointestinal, respiratory,
149 central nervous system, cardiovascular and metabolic disorders. The
150 oligomers are also used for detecting cell type differentiation. ABC00010
151 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
152 represent the oligomers described in the invention. NOTE: The sequence
153 data for this patent did not form part of the printed specification, but
154 was obtained in electronic format from WIPO at
155 ftp.wipo.int/pub/published_pct_sequences

```

```

DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 35614; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 8 A; 3 C; 0 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 15.6%; Score 11.4; DB 1; Length 13;
XX Best Local Similarity 92.3%; Pred. NO. 6.2e+02;
XX Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
OY 944 TTGTTTAAATGTA 956
XX |||||
Db 13 TTGTTTAAATGTA 1
XX
RESULT 192
ID ABF33003 standard; DNA; 13 BP.
XX
AC ABF33003;
XX
XX 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 133000 for detecting SNP TSC0033182.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 133000; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX

```

CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 2 A; 6 C; 0 G; 5 T; 0 U; 0 Other;
 SQ Query Match 15.6%; Score 11.4; DB 1; Length 13;
 Best Local Similarity 92.3%; Pred. No. 6.2e+02;
 Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 931 TCCCTCCTCTCA 943
 DB 1 TCCCTCCTCTCA 13

RESULT 193
 ABC54454
 ID ABC54454 standard; DNA; 13 BP.
 XX AC
 XX ABC54454;

XX 21-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 54471 for detecting SNP TSC0014932.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX

OS Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.

XX Claim 1; SEQ ID NO 54471; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 4 A; 0 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 15.6%; Score 11.4; DB 1; Length 13;
 Best Local Similarity 92.3%; Pred. No. 6.2e+02;
 Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 941 TCATTGCTTTAA 953
 DB 1 TAATTGCTTTAA 13

RESULT 194

ABC25842
 ID ABC25842 standard; DNA; 13 BP.

XX AC

XX ABC25842;

XX 20-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 25859 for detecting SNP TSC0006595.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX OS Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.

XX Claim 1; SEQ ID NO 25859; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 15.6%; Score 11.4; DB 1; Length 13;
 Best Local Similarity 92.3%; Pred. No. 6.2e+02;
 Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 940 TTCATTGCTTTAA 952
 DB 1 TTTATTGCTTTAA 13

RESULT 195

ABC40096/C
 ID ABC40096 standard; DNA; 13 BP.

XX AC

XX ABC40096;

XX 21-FEB-2002 (first entry)

```
1 Oligonucleotide SEQ ID NO 40113 for detecting SNP TSC0012202.
2
3 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
4 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
5 central nervous system; gastrointestinal; respiratory; immune; metabolic.
6
7 Homo sapiens.
8
9 WO200177384-A2.
10
11 18-OCT-2001.
12
13 06-APR-2001; 2001WO-IB000713.
14
15 07-APR-2000; 2000DE-01019173.
16
17 (EPIG-) EPIGENOMICS AG.
18
19 Olek A, Piepenbrock C, Berlin K;
20
21 WPI; 2001-657177/75.
22
23 Set of oligonucleotides, useful for diagnosis and cell typing, is
24 designed to detect single-nucleotide polymorphisms and cytosine
25 methylation status.
26
27 Claim 1; SEQ ID NO 40113; 29pp + Sequence Listing; German.
28
29 This invention describes novel oligonucleotide primers or peptide nucleic
30 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
31 and cytosine methylation status in chemically pretreated genomic DNA. The
32 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
33 range of diseases including immune system, gastrointestinal, respiratory,
34 central nervous system, cardiovascular and metabolic disorders. The
35 oligomers are also used for detecting cell type differentiation. ABC00010
36 -ABG9989, ABF0010-ABF9989, ABH0010-ABH9989 and ABI0010-ABI82073
37 represent the oligomers described in the invention. NOTE: The sequence
38 data for this patent did not form part of the printed specification, but
39 was obtained in electronic format from WIPO at
40 ftp.wipo.int/pub/published_pct_sequences
41
42 Sequence 13 BP; 8 A; 0 C; 4 G; 1 T; 0 U; 0 Other;
43
44 Query Match 15.6%; Score 11.4; DB 1; Length 13;
45 Best Local Similarity 92.3%; Pred. No. 6.2e+02;
46 Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
47
48 918 TCTTTGCCCTTTA 930
49 ||||| |||||
50 13 TCTTTCCCTTTA 1
51
52 RESULT 196
53 ABC0097
54 ABC40097 standard; DNA; 13 BP.
55
56 ABC40097;
57
58 21-FEB-2002 (first entry)
59
60 Oligonucleotide SEQ ID NO 40114 for detecting SNP TSC0012202.
61
62 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
63 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
64 central nervous system; gastrointestinal; respiratory; immune; metabolic.
65
66 Homo sapiens.
67
68 WO200177384-A2.
69
70 18-OCT-2001.
```

```
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
PI WPI; 2001-657177/75.
XX
DR Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
PS Claim 1; SEQ ID NO 40114; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABG9989, ABF0010-ABF9989, ABH0010-ABH9989 and ABI0010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 1 A; 4 C; 0 G; 8 T; 0 U; 0 Other;
XX
Query Match 15.6%; Score 11.4; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 6.2e+02;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 918 TCTTTGCCCTTTA 930
Db 1 TCTTTCCCTTTA 13
||||| |||||
RESULT 197
ABC20177
ID ABC20177 standard; DNA; 13 BP.
XX
AC ABC20177;
XX
DT 20-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 20194 for detecting SNP TSC0004139.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
```

XX Claim 1; SEQ ID NO 20194; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

XX
XX Sequence 13 BP; 3 A; 2 C; 1 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 15.6%; Score 11.4; DB 1; Length 13;
XX Best Local Similarity 92.3%; Pred. No. 6.2e+02;
XX Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 941 TCATTGGTTTAAAT 953
Db 1 TCATTGGTTTAAAT 13
|||||

RESULT 198
ABF31356/c
ID ABF31356 standard; DNA; 13 BP.
XX
XX AC ABF31356;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 131353 for detecting SNP TSC0032783.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
XX
XX Claim 1; SEQ ID NO 131353; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but

CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 6 A; 0 C; 6 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 15.6%; Score 11.4; DB 1; Length 13;
XX Best Local Similarity 92.3%; Pred. No. 6.2e+02;
XX Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 931 TCCTCTCTCTTCA 943
Db 13 TCCTCTCTCTTCA 1
|||||

RESULT 199
ABF33002/c
ID ABF33002 standard; DNA; 13 BP.
XX
XX AC ABF33002;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 132999 for detecting SNP TSC0033182.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
XX
XX Claim 1; SEQ ID NO 132999; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

XX
XX Sequence 13 BP; 5 A; 0 C; 6 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 15.6%; Score 11.4; DB 1; Length 13;
XX Best Local Similarity 92.3%; Pred. No. 6.2e+02;
XX Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 931 TCCTCTCTCTTCA 943
Db 13 TCCTCTCTCTTCA 1
|||||

```
35ULT 200
3F31357
) ABEF31357 standard; DNA; 13 BP.
{
{ ABEF31357;
{
{ 21-FEB-2002 (first entry)
{
{ Oligonucleotide SEQ ID NO 131354 for detecting SNP TSC0032783.
{
{ SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
{ peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
{ central nervous system; gastrointestinal; respiratory; immune; metabolic.
{
{ Homo sapiens.
{
{ WO200177384-A2.
{
{ 18-OCT-2001.
{
{ 06-APR-2001; 2001WO-IB000713.
{
{ 07-APR-2000; 2000DE-01019173.
{
{ (EPIG-) EPIGENOMICS AG.
{
{ Olek A, Piepenbrock C, Berlin K;
{
{ WPI; 2001-657177/75.
{
{ Set of oligonucleotides, useful for diagnosis and cell typing, is
{ designed to detect single-nucleotide polymorphisms and cytosine
{ methylation status.
{
{ Claim 1; SEQ ID NO 131354; 29pp + Sequence Listing; German.
{
{ This invention describes novel oligonucleotide primers or peptide nucleic
{ acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
{ and cytosine methylation status in chemically pretreated genomic DNA. The
{ oligonucleotides are used for diagnosis and/or prognosis of cancer and a
{ range of diseases including immune system, gastrointestinal, respiratory,
{ central nervous system, cardiovascular and metabolic disorders. The
{ oligomers are also used for detecting cell type differentiation. ABC00010
{ -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
{ represent the oligomers described in the invention. NOTE: The sequence
{ data for this patent did not form part of the printed specification, but
{ was obtained in electronic format from WIPO at
{ ftp.wipo.int/pub/published_pct_sequences
{
{ Sequence 13 BP; 1 A; 6 C; 0 G; 6 T; 0 U; 0 Other;
{
{ Query Match 15.6%; Score 11.4; DB 1; Length 13;
{ Best Local Similarity 92.3%; Pred. No. 6.2e+02;
{ Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
{
{ 931 TCCCTCCTCTTCA 943
{
{ 1 TCCCTCCTCTTCA 13
{
{ 35ULT 201
{ 3C35596
{ ) ABC35596 standard; DNA; 13 BP.
{
{ ABC35596;
{
{ 20-FEB-2002 (first entry)
{
{ Oligonucleotide SEQ ID NO 35613 for detecting SNP TSC0011256.
{
{ SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
{ peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
{ central nervous system; gastrointestinal; respiratory; immune; metabolic.
{
{ Homo sapiens.
{
{ WO200177384-A2.
{
{ 18-OCT-2001.
{
{ 06-APR-2001; 2001WO-IB000713.
{
{ 07-APR-2000; 2000DE-01019173.
{
{ (EPIG-) EPIGENOMICS AG.
{
{ Olek A, Piepenbrock C, Berlin K;
{
{ WPI; 2001-657177/75.
{
{ Set of oligonucleotides, useful for diagnosis and cell typing, is
{ designed to detect single-nucleotide polymorphisms and cytosine
{ methylation status.
{
{ Claim 1; SEQ ID NO 131354; 29pp + Sequence Listing; German.
{
{ This invention describes novel oligonucleotide primers or peptide nucleic
{ acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
{ and cytosine methylation status in chemically pretreated genomic DNA. The
{ oligonucleotides are used for diagnosis and/or prognosis of cancer and a
{ range of diseases including immune system, gastrointestinal, respiratory,
{ central nervous system, cardiovascular and metabolic disorders. The
{ oligomers are also used for detecting cell type differentiation. ABC00010
{ -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
{ represent the oligomers described in the invention. NOTE: The sequence
{ data for this patent did not form part of the printed specification, but
{ was obtained in electronic format from WIPO at
{ ftp.wipo.int/pub/published_pct_sequences
{
{ Sequence 13 BP; 1 A; 6 C; 0 G; 6 T; 0 U; 0 Other;
{
{ Query Match 15.6%; Score 11.4; DB 1; Length 13;
{ Best Local Similarity 92.3%; Pred. No. 6.2e+02;
{ Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
{
{ 931 TCCCTCCTCTTCA 943
{
{ 1 TCCCTCCTCTTCA 13
{
{ 35ULT 201
{ 3C35596
{ ) ABC35596 standard; DNA; 13 BP.
{
{ ABC35596;
{
{ 20-FEB-2002 (first entry)
{
{ Oligonucleotide SEQ ID NO 35613 for detecting SNP TSC0011256.
{
{ SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
{ peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
{ central nervous system; gastrointestinal; respiratory; immune; metabolic.
{
{ Homo sapiens.
{
{ WO200177384-A2.
{
{ 18-OCT-2001.
{
{ 06-APR-2001; 2001WO-IB000713.
{
{ 07-APR-2000; 2000DE-01019173.
{
{ (EPIG-) EPIGENOMICS AG.
```

```
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 35613; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 2 A; 0 C; 3 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 15.6%; Score 11.4; DB 1; Length 13;
XX Best Local Similarity 92.3%; Pred. No. 6.2e+02;
XX Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX 944 TTGGTTTATTGTA 956
XX 1 TTGGTTTATTGTA 13
XX
XX RESULT 202
XX ABC20176/c
XX ID ABC20176 standard; DNA; 13 BP.
XX
XX ABC20176;
XX
XX 20-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 20193 for detecting SNP TSC0004139.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
```


XX
PI Olek A, Piepenbrock C, Berlin K;
DR WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 20193; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 7 A; 1 C; 2 G; 3 T; 0 U; 0 Other;
Query Match 15.6%; Score 11.4; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 6.2e+02;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
OY 941 TCATTGGTTTAAAT 953
Db 13 TCATTGGTTTAAAT 1
RESULT 203
ABC54455/C
ID ABC54455 standard; DNA; 13 BP.
XX
AC ABC54455;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 54472 for detecting SNP TSC0014932.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 54472; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 7 A; 2 C; 0 G; 4 T; 0 U; 0 Other;
Query Match 15.6%; Score 11.4; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 6.2e+02;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
OY 941 TCATTGGTTTAAAT 953
Db 13 TCATTGGTTTAAAT 1
RESULT 204
AAT37613
ID AAT37613 standard; mRNA; 15 BP.
XX
AC AAT37613;
XX
XX 11-NOV-1996 (first entry)
XX
XX Apo(a) mRNA (nt. pos. 12974) hammerhead ribozyme target sequence.
XX
XX Enzymatic RNA molecule; cleavage; apolipoprotein (a); apo(a);
KW hammerhead ribozyme; target sequence; diagnosis; treatment;
KW lipoprotein (a); atherosclerosis; myocardial infarction; stroke;
KW restenosis; heart disease; human; ss.
XX
XX Homo sapiens.
XX
XX WO9609392-A1.
XX
XX 28-MAR-1996.
XX
XX 21-SEP-1995; 95WO-US011995.
XX
XX 23-SEP-1994; 94US-00311760.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Stinchcomb DT, Mcswiggen J, Newton RS, Ramharack R;
XX WPI; 1996-188454/19.
XX
XX Enzymatic RNA mols. which cleave apo(a) mRNA - useful in diagnosis and
PT treatment of conditions related to Lp(a) levels, e.g. atherosclerosis,
PT myocardial infarction, and heart diseases.
XX
XX Claim 2; Page 18; 37pp; English.
XX
XX A claimed enzymatic RNA mol. for the cleavage of apolipoprotein (a)
CC (apo(a)) mRNA, specifically a hammerhead ribozyme, has binding arms
CC complementary to the present sequence (nucleotide position 12974). The
CC ribozyme blocks to some extent apo(a) expression, and can therefore be
CC used to diagnose or treat conditions related to lipoprotein (a) levels,
CC e.g. atherosclerosis, myocardial infarction, stroke, restenosis and heart
CC disease. PCR was used to generate a substrate for T7 RNA polymerase
CC transcription from human apo(a) cDNA clones. Labelled transcripts were
CC synthesised in vitro to form 2 templates. The oligonucleotides and
CC labelled transcripts were annealed, RNaseH added and the mixts.
CC incubated. After a designated time the reactions were stopped, and RNA
CC sepd. on sequencing polyacrylamide gels. The percentage of substrate
CC cleaved was determined by autoradiographic quantification, and the most
CC accessible ribozyme target sites chosen

```

1  Sequence 15 BP; 2 A; 5 C; 1 G; 0 T; 7 U; 0 Other;
2
3  Query Match      15.6%; Score 11.4; DB 1; Length 15;
4  Best Local Similarity 46.2%; Pred. No. 6.8e+02;
5  Matches 6; Conservative 6; Mismatches 1; Indels 0; Gaps 0;
6
7  933 CCTCTCTTCATT 945
8  1 :||:|:|:|:|:|
9  2 CAUCCUUCUUAU 14
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100
101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
163
164
165
166
167
168
169
170
171
172
173
174
175
176
177
178
179
180
181
182
183
184
185
186
187
188
189
190
191
192
193
194
195
196
197
198
199
200
201
202
203
204
205
206
207
208
209
210
211
212
213
214
215
216
217
218
219
220
221
222
223
224
225
226
227
228
229
230
231
232
233
234
235
236
237
238
239
240
241
242
243
244
245
246
247
248
249
250
251
252
253
254
255
256
257
258
259
260
261
262
263
264
265
266
267
268
269
270
271
272
273
274
275
276
277
278
279
280
281
282
283
284
285
286
287
288
289
290
291
292
293
294
295
296
297
298
299
300
301
302
303
304
305
306
307
308
309
310
311
312
313
314
315
316
317
318
319
320
321
322
323
324
325
326
327
328
329
330
331
332
333
334
335
336
337
338
339
340
341
342
343
344
345
346
347
348
349
350
351
352
353
354
355
356
357
358
359
360
361
362
363
364
365
366
367
368
369
370
371
372
373
374
375
376
377
378
379
380
381
382
383
384
385
386
387
388
389
390
391
392
393
394
395
396
397
398
399
400
401
402
403
404
405
406
407
408
409
410
411
412
413
414
415
416
417
418
419
420
421
422
423
424
425
426
427
428
429
430
431
432
433
434
435
436
437
438
439
440
441
442
443
444
445
446
447
448
449
450
451
452
453
454
455
456
457
458
459
460
461
462
463
464
465
466
467
468
469
470
471
472
473
474
475
476
477
478
479
480
481
482
483
484
485
486
487
488
489
490
491
492
493
494
495
496
497
498
499
500
501
502
503
504
505
506
507
508
509
510
511
512
513
514
515
516
517
518
519
520
521
522
523
524
525
526
527
528
529
530
531
532
533
534
535
536
537
538
539
540
541
542
543
544
545
546
547
548
549
550
551
552
553
554
555
556
557
558
559
560
561
562
563
564
565
566
567
568
569
570
571
572
573
574
575
576
577
578
579
580
581
582
583
584
585
586
587
588
589
590
591
592
593
594
595
596
597
598
599
600
601
602
603
604
605
606
607
608
609
610
611
612
613
614
615
616
617
618
619
620
621
622
623
624
625
626
627
628
629
630
631
632
633
634
635
636
637
638
639
640
641
642
643
644
645
646
647
648
649
650
651
652
653
654
655
656
657
658
659
660
661
662
663
664
665
666
667
668
669
670
671
672
673
674
675
676
677
678
679
680
681
682
683
684
685
686
687
688
689
690
691
692
693
694
695
696
697
698
699
700
701
702
703
704
705
706
707
708
709
710
711
712
713
714
715
716
717
718
719
720
721
722
723
724
725
726
727
728
729
730
731
732
733
734
735
736
737
738
739
740
741
742
743
744
745
746
747
748
749
750
751
752
753
754
755
756
757
758
759
760
761
762
763
764
765
766
767
768
769
770
771
772
773
774
775
776
777
778
779
780
781
782
783
784
785
786
787
788
789
790
791
792
793
794
795
796
797
798
799
800
801
802
803
804
805
806
807
808
809
810
811
812
813
814
815
816
817
818
819
820
821
822
823
824
825
826
827
828
829
830
831
832
833
834
835
836
837
838
839
840
841
842
843
844
845
846
847
848
849
850
851
852
853
854
855
856
857
858
859
860
861
862
863
864
865
866
867
868
869
870
871
872
873
874
875
876
877
878
879
880
881
882
883
884
885
886
887
888
889
890
891
892
893
894
895
896
897
898
899
900
901
902
903
904
905
906
907
908
909
910
911
912
913
914
915
916
917
918
919
920
921
922
923
924
925
926
927
928
929
930
931
932
933
934
935
936
937
938
939
940
941
942
943
944
945
946
947
948
949
950
951
952
953
954
955
956
957
958
959
960
961
962
963
964
965
966
967
968
969
970
971
972
973
974
975
976
977
978
979
980
981
982
983
984
985
986
987
988
989
990
991
992
993
994
995
996
997
998
999
1000

```

```

RESULT 206
AAT35030/C
ID AAT35030 standard; DNA; 15 BP.
XX
AC AAT35030;
XX
DT 18-FEB-1997 (first entry)
XX
DE Triplex-forming oligonucleotide targetting HPV ORF-Ec.
XX
KW HPV; oligodeoxyribonucleotide; homopurine-homopyrimidine target; block;
KW in vitro; DNA synthesis; DNA polymerase; Sequenase3; Tag; Vent; Pol I;
KW accessory replication protein; SSB protein; sequence-specific;
KW triplex-forming oligonucleotide; exon 3; inverted repeat; IR110;
KW human papilloma virus; ORF-Ec; ss.
XX
OS Synthetic.
XX
PN WO9618732-A2.
XX
PD 20-JUN-1996.
XX
PF 14-DEC-1995; 95WO-US016368.
XX
PR 15-DEC-1994; 94US-00358089.
XX
PS (UNII ) UNIV ILLINOIS FOUND.
XX
PI Mirkin SM, Samadashwily GM;
XX
DR WPI; 1996-300649/30.
XX
PT Sequence specific inhibition of DNA synthesis - by triplex-forming
PT oligo:nucleotide(s), for detection of oncogene mutation(s) and treatment
PT of e.g. HSV, Hepatitis C and Papillomavirus infection.
XX
PS Claim 19; Page 58; 78pp; English.
XX
CC Specifically designed oligodeoxyribonucleotides form triplexes in single-
CC or double-strand DNA at homopurine-homopyrimidine targets. These
CC triplexes block in vitro DNA synthesis by all DNA polymerases studied,
CC including Sequenase3, Tag, Vent, and Pol I. A similar phenomenon occurs
CC when DNA polymerases are supplemented with accessory replication
CC proteins, including SSB protein. Replication blockage is highly sequence-
CC specific and even one or two point substitutions within either the target
CC sequence or the oligonucleotide abolish the effect. Sequence-specific
CC blocking of DNA replication in vivo is facilitated by the methods and
CC compositions of the present invention. The present sequence is a triplex-
CC forming oligonucleotide which targets ORF-Ec of human papilloma virus
CC (position 436-452 in HPV57 and 438-452 in HPV2)
XX
SQ Sequence 15 BP; 5 A; 0 C; 10 G; 0 T; 0 U; 0 Other;
XX
Query Match      15.6%; Score 11.4; DB 1; Length 15;
Best Local Similarity 92.3%; Pred. No. 6.8e+02;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 932 CCTCTCTTCATT 944
DB 15 CCTCTCTTCCTCT 3
RESULT 207
AAX34457/C
ID AAX34457 standard; DNA; 15 BP.
XX
AC AAX34457;
XX
DT 25-JUN-1999 (first entry)
XX
DE Template sequence codon 12.

```

XX Rolling template; nucleic acid synthesis; polynucleotide polymerase;
 KW gene production; primer; ss.
 XX Synthetic.
 OS WO9914370-A1.
 PN 25-MAR-1999.
 XX
 PD 15-SEP-1998; 98WO-US019157.
 XX
 PF 15-SEP-1997; 97US-00929856.
 XX
 PR (HIAT/) HIAT A. C.
 XX (ROSE/) ROSE F. D.
 PA
 PI Hiatt AC, Rose FD;
 XX WPI; 1999-244045/20.
 DR
 XX Producing specific polynucleotides using rolling templates.
 XX Example 5; Page 38; 109pp; English.
 XX
 CC The invention relates to a method for producing polynucleotides having a
 CC defined sequence using rolling templates that successively add
 CC nucleotides (nts) to a longer primer strand. The method comprises: (i)
 CC incubating, under annealing conditions, a primer and a template that has
 CC a 5'-region not complementary to the primer, a 3'-region complementary to
 CC the 3'-end of primer and a non-reactive 3'-terminus, with the template
 CC being shorter than the primer; (ii) reacting the primer with at least one
 CC nt in presence of a template-dependent polynucleotide polymerase to
 CC extend it by at least one nt (complementary to the 5'-region of template)
 CC at its 3'-end; (iii) separating the template and the extended primer; and
 CC (iv) repeating the cycle of (i)-(iii) as often as needed to synthesize
 CC the desired polynucleotide. The method is especially used to produce
 CC genes or their segments. The method provides fast, accurate, inexpensive
 CC synthesis of RNA or DNA and is more efficient than chemical coupling
 CC processes. It has higher specificity and eliminates the need for
 CC deprotection. The products can be cloned directly. The method avoids
 CC problems of waste disposal and includes an inherent editing effect
 CC (failure sequences will not be extended further in subsequent rounds) so
 CC that purification of the end product is facilitated. Synthesis may take
 CC place on a vector, simplifying cloning and sequences with codon usage
 CC optimized for a particular host can be prepared
 XX
 SQ Sequence 15 BP; 5 A; 2 C; 6 G; 2 T; 0 U; 0 Other;
 Query Match 15.6%; Score 11.4; DB 1; Length 15;
 Best Local Similarity 92.3%; Pred. No. 6.8e+02;
 Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 931 TCCCTCCTCTTCA 943
 DB | | | | | | | | | |
 15 TGCCTCCTCTTCA 3
 RESULT 208
 AAA26829
 ID AAA26829 standard; DNA; 15 BP.
 XX
 AC AAA26829;
 XX
 DT 29-JUN-2000 (first entry)
 XX
 DE Trichosporon aquatile polynucleotide sequence SEQ ID NO:96.
 KW Trichosporon genus microbe; detection; species-specific; diagnosis;
 KW trichosporosis; ds.
 XX Trichosporon aquatile.
 CS

PN JP2000060564-A.
 XX
 PD 29-FEB-2000.
 XX
 PF 24-AUG-1998; 98JP-00237060.
 XX
 PR 24-AUG-1998; 98JP-00237060.
 XX
 PA (IATR) IATRON LAB INC.
 XX
 DR WPI; 2000-249679/22.
 XX
 PF Species-specific detection of a Trichosporon genus microbe species and a
 PT new polynucleotide - used for the diagnosis and the treatment of
 PT Trichosporosis.
 XX
 PS Disclosure; Page 44; 47pp; Japanese.
 XX
 CC The present invention describes a method for the species-specific
 CC detection of a Trichosporon genus microbe which includes detecting a
 CC polynucleotide specific to the species of a Trichosporon genus microbe.
 CC Trichosporon polynucleotides can be used for the diagnosis and treatment
 CC of Trichosporosis. The method can distinguish Trichosporosis species to
 CC species level rapidly in high precision. AAA26734 to AAA26849 represent
 CC polynucleotide sequences from various Trichosporon species, which are
 CC used in the exemplification of the present invention
 XX
 SQ Sequence 15 BP; 5 A; 2 C; 2 G; 6 T; 0 U; 0 Other;
 Query Match 15.6%; Score 11.4; DB 1; Length 15;
 Best Local Similarity 92.3%; Pred. No. 6.8e+02;
 Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 940 TTCATTGCTTAA 952
 DB | | | | | | | | | |
 1 TTCATTGCTTAA 13
 RESULT 209
 AAF49433
 ID AAF49433 standard; DNA; 15 BP.
 XX
 AC AAF49433;
 XX
 DT 30-MAR-2001 (first entry)
 XX
 DE IGF-I oligonucleotide #393.
 XX
 KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
 KW cytosstatic; dermatological; cardiant; virucide; ophthalmological; keloid;
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
 KW hyperneovascular condition; hyperplasia; kidney disease;
 KW neovascular condition of the retina; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200078341-A1.
 XX
 PD 28-DEC-2000.
 XX
 PF 21-JUN-2000; 2000WO-AU000693.
 XX
 PR 21-JUN-1999; 99US-0140345P.
 XX
 PA (MURD-) MURDOCH CHILDRENS RES INST.
 XX
 PI Wraight CU, Werther GA, Edmondson SR;
 XX WPI; 2001-041421/05.
 XX

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 8; Page 63; 201pp; English.

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia

Sequence 15 BP; 2 A; 5 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 15.6%; Score 11.4; DB 1; Length 15;

Best Local Similarity 92.3%; Pred. No. 6.8e+02;

Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

900 CCTGGTCATTTTC 912

|||||||

1 CCTGGTCATCTTC 13

RESULT 210

AF49430

AAF49430 standard; DNA; 15 BP.

AAF49430;

30-MAR-2001 (first entry)

IGF-I oligonucleotide #390.

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; insulin-like Growth Factor 1 receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.

Homo sapiens.

WO200078341-A1.

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693.

21-JUN-1999; 99US-0140345P.

(MURD-) MURDOCH CHILDRENS RES INST.

Wright CJ, Werther GA, Edmondson SR;

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

XX

PS

XX

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

CC

Example 8; Page 63; 201pp; English.

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia

Sequence 15 BP; 1 A; 6 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 15.6%; Score 11.4; DB 1; Length 15;

Best Local Similarity 92.3%; Pred. No. 6.8e+02;

Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 899 CCTGGTCATTTT 911

|||||||

3 CCTGGTCATCTT 15

RESULT 211

AAF70053/c

ID AAF70053 standard; DNA; 15 BP.

AC AAF70053;

18-APR-2001 (first entry)

Human TNFRSF11B gene ASO probe, SEQ ID NO: 109.

Human; TNFRSF11B; osteoclastogenesis inhibitory factor; single nucleotide polymorphism; SNP; osteoclast recruitment; osteoclast function; osteoporosis; metastatic bone disease; Paget's disease; rheumatoid arthritis; periodontal bone disease; ASO; allele-specific oligonucleotide; probe; ss.

Homo sapiens.

WO200104137-A1.

18-JAN-2001.

10-JUL-2000; 2000WO-US018803.

09-JUL-1999; 99US-0143020P.

(GENA-) GENAISSANCE PHARM INC.

Chew A, Denton RR, Duda A, Nandabalan K, Stephens JC;

WPI; 2001-147175/15.

Human Osteoclastogenesis Inhibitory Factor nucleotides, comprising single nucleotide polymorphisms, useful for studying e.g. osteoporosis, Paget's disease and rheumatoid arthritis.

Claim 15; Page 23; 114pp; English.

The present sequence is a probe used to detect polymorphisms in the human osteoclastogenesis inhibitory factor (TNFRSF11B). Polynucleotides comprising one or more of twenty four novel single nucleotide polymorphisms in the TNFRSF11B gene have been identified. TNFRSF11B regulate osteoclast recruitment and function. An understanding of

```
CC variations in the gene should thus be useful in developing new therapies
CC for metabolic disorders caused by abnormal osteoclast recruitment and
CC function such as osteoporosis, metastatic bone disease, Paget's disease,
CC rheumatoid arthritis and periodontal bone disease
XX
SQ Sequence 15 BP; 7 A; 3 C; 3 G; 2 T; 0 U; 0 Other;
  Query Match      15.6%; Score 11.4; DB 1; Length 15;
  Best Local Similarity 92.3%; Pred. No. 6.8e+02;
  Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
  QY 906 CATTTCCTTTGGT 918
  DB 15 CATTACTTTGGT 3
  RESULT 212
  ID AAF69384/c
  AC AAF69384 standard; DNA; 15 BP.
  XX
  AC AAF69384;
  XX
  DT 18-APR-2001 (first entry)
  DE Human IL4Ralpha gene probe #24.
  XX
  XX Polymorphism; human; interleukin 4 receptor-alpha; IL4R-alpha;
  KW allergic disease; probe; ss.
  XX
  CS Homo sapiens.
  XX
  FN WO200104270-A1.
  XX
  PD 18-JAN-2001.
  XX
  PP 13-JUL-2000; 2000WO-US019094.
  XX
  PR 13-JUL-1999; 99US-0143435P.
  XX
  PA (GENA-) GENAISSANCE PHARM INC.
  XX
  PI Chew A, Denton RR, Duda A, Nandabalan K, Stephens JC;
  PL Windemuth AK;
  XX
  DR WPI; 2001-103078/11.
  XX
  PT New isolated polynucleotide useful for the identification of therapeutics
  FT in allergic diseases is new.
  XX
  ES Claim 15; Page 42; 189pp; English.
  CC
  CC The present invention relates to polymorphisms of the human interleukin 4
  CC receptor-alpha gene (IL4R-alpha; see AAF57718 for the reference
  CC sequence). Polynucleotides comprising polymorphic gene variants are
  CC useful for therapeutic purposes. For example, where a patient may benefit
  CC from expression of a particular IL4Ralpha protein isoform, an expression
  CC vector encoding the isoform may be administered to the patient. It may
  CC desirable to decrease or block expression of a particular IL4Ralpha
  CC isogene, which may be done by turning off by transfection a targeted
  CC organ, tissue or cell population with an expression vector that expresses
  CC high levels of untranslatable mRNA for the isogene. Specific therapeutics
  CC identified by these methods may be useful for allergic diseases. The
  CC present sequence is a probe for human IL4R-alpha
  XX
  SQ Sequence 15 BP; 5 A; 3 C; 5 G; 2 T; 0 U; 0 Other;
  Query Match      15.6%; Score 11.4; DB 1; Length 15;
  Best Local Similarity 92.3%; Pred. No. 6.8e+02;
  Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
  QY 900 CCGGTGCTATTTTC 912
  DB 15 CCGGTGCTATTTTC 3
```

```
RESULT 213
ABL57627/c
ID ABL57627 standard; DNA; 15 BP.
XX
AC ABL57627;
XX
DT 08-OCT-2002 (first entry)
XX
DE Human SCYA24 ASO primer #12.
XX
XX SCYA24; human; small inducible cytokine; isogene; antiasthmatic; asthma;
KW gene therapy; respiratory inflammatory disease; polymorphism; primer; ss.
XX
OS Homo sapiens.
XX
FN WO200220851-A1.
XX
PD 14-MAR-2002.
XX
PP 10-SEP-2001; 2001WO-US028328.
XX
PR 08-SEP-2000; 2000US-0231129P.
XX
PA (GENA-) GENAISSANCE PHARM INC.
XX
PI Anastasio AE, Han J, Kazemi A;
XX
DR WPI; 2002-351785/38.
XX
XX New genetic variants of small inducible cytokine subfamily A member 24
PT gene, useful in studying expression and function of the protein, and for
PT screening drugs to treat diseases such as asthma.
XX
PS Claim 16; Page 14; 98pp; English.
XX
CC The invention relates to a novel isolated polynucleotide comprising a
CC small inducible cytokine subfamily A (cys-cys), member 24 (SCYA24)
CC isogene. The polypeptide of the invention has antiasthmatic activity. The
CC polynucleotide may have a use in gene therapy. The polynucleotide and
CC polypeptide are useful in the development of drugs for treating
CC diseases associated with SCYA24 activity, e.g. respiratory inflammatory
CC diseases such as asthma. Allele-specific oligonucleotide (ASO) primers
CC used for detecting polymorphisms in the SCYA24 gene are represented in
CC ABL57616-ABL57645
XX
SQ Sequence 15 BP; 8 A; 0 C; 6 G; 0 T; 0 U; 1 Other;
  Query Match      15.6%; Score 11.4; DB 1; Length 15;
  Best Local Similarity 80.0%; Pred. No. 6.8e+02;
  Matches 12; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
  QY 927 TTTATCCCTCCTCTT 941
  DB 15 TTTCTCTCTCCTCTT 1
  RESULT 214
  ID AAA18974
  AC AAA18974 standard; RNA; 17 BP.
  XX
  AC AAA18974;
  XX
  DT 19-JUN-2000 (first entry)
  XX
  DE Human TIE-2 substrate sequence SEQ ID NO:2200.
  XX
  KW Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
  KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
  KW hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;
  KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
  KW dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
  KW
```



```
XX
DT 19-JUN-2000 (first entry)
DE Human TIE-2 substrate sequence SEQ ID NO:2202.
XX
XX
XX
XX
XX Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
XX integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
XX hammerhead ribozyme; angiogenic factor; cytosolic; antidiabetic;
XX ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
XX age related macular degeneration; cancer; diabetic retinopathy; arthritis;
XX dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
XX myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
XX tuberosus sclerosis; pot-wine stain; Sturge Weber syndrome;
XX Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
XX
XX Homo sapiens.
XX
XX WO9950403-A2.
XX
XX 07-OCT-1999.
XX
XX 24-MAR-1999; 99WO-US006507.
XX
XX 27-MAR-1998; 98US-0079678P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;
XX
XX MPI; 1999-591315/50.
XX
XX Novel ribozymes for modulating the synthesis, expression and/or stability
XX of an mRNA encoding an angiogenic factors.
XX
XX Claim 56; Page 128; 305pp; English.
XX
XX The present invention describes enzymatic nucleic acid molecules with RNA
XX cleaving activity, which specifically cleave RNA encoded by an aryl
XX hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
XX gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
XX AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
XX and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
XX corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
XX AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
XX and AAA19155 to AAA19222 represent their corresponding target sequences;
XX AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
XX sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
XX AAA21596 to AAA21688 represent their corresponding target sequences;
XX AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme
XX for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
XX AAA23422 represent their corresponding target sequences. The ribozymes of
XX the invention are used for modulating the synthesis, expression and/or
XX stability of an mRNA encoding angiogenic factor, especially ARNT,
XX integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
XX especially used to treat cancer, diabetic retinopathy, age related
XX macular degeneration (ARMD), inflammation, and arthritis, as well as
XX neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
XX angiofibroma of tuberosus sclerosis, pot-wine stains, Sturge Weber
XX syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
XX and other syndromes and diseases related to the levels of ARNT, Tie-2,
XX integrin subunit alpha-6, or integrin subunit beta-3
XX
XX Sequence 17 BP; 3 A; 7 C; 0 G; 0 T; 7 U; 0 Other;
XX
XX Query Match 15.6%; Score 11.4; DB 1; Length 17;
XX Best Local Similarity 46.2%; Pred. No. 7.3e+02;
XX Matches 6; Conservative 6; Mismatches 1; Indels 0; Gaps 0;
XX
XX 924 CCTTTATCCCTC 936
XX | : : : : | : : : : |
XX 3 CAUUUUAUCCGUC 15
```

```
RESULT 217
AAA20482
ID AAA20482 standard; RNA; 17 BP.
XX
XX AAA20482;
XX
XX 19-JUN-2000 (first entry)
XX
XX Integrin alpha 6 subunit substrate sequence SEQ ID NO:3708.
XX
XX Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
XX integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
XX hammerhead ribozyme; angiogenic factor; cytosolic; antidiabetic;
XX ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
XX dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
XX age related macular degeneration; inflammation; neovascular glaucoma;
XX myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
XX tuberosus sclerosis; pot-wine stain; Sturge Weber syndrome;
XX Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
XX
XX Homo sapiens.
XX
XX WO9950403-A2.
XX
XX 07-OCT-1999.
XX
XX 24-MAR-1999; 99WO-US006507.
XX
XX 27-MAR-1998; 98US-0079678P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;
XX
XX MPI; 1999-591315/50.
XX
XX Novel ribozymes for modulating the synthesis, expression and/or stability
XX of an mRNA encoding an angiogenic factors.
XX
XX Claim 55; Page 148; 305pp; English.
XX
XX The present invention describes enzymatic nucleic acid molecules with RNA
XX cleaving activity, which specifically cleave RNA encoded by an aryl
XX hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
XX gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
XX AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
XX and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
XX corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
XX AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
XX and AAA19155 to AAA19222 represent their corresponding target sequences;
XX AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
XX sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
XX AAA21596 to AAA21688 represent their corresponding target sequences;
XX AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme
XX for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
XX AAA23422 represent their corresponding target sequences. The ribozymes of
XX the invention are used for modulating the synthesis, expression and/or
XX stability of an mRNA encoding angiogenic factor, especially ARNT,
XX integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
XX especially used to treat cancer, diabetic retinopathy, age related
XX macular degeneration (ARMD), inflammation, and arthritis, as well as
XX neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
XX angiofibroma of tuberosus sclerosis, pot-wine stains, Sturge Weber
XX syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
XX and other syndromes and diseases related to the levels of ARNT, Tie-2,
XX integrin subunit alpha-6, or integrin subunit beta-3
XX
XX Sequence 17 BP; 2 A; 2 C; 4 G; 0 T; 9 U; 0 Other;
XX
XX Query Match 15.6%; Score 11.4; DB 1; Length 17;
XX Best Local Similarity 30.8%; Pred. No. 7.3e+02;
XX Matches 4; Conservative 8; Mismatches 1; Indels 0; Gaps 0;
```

```

908 TTTTCTTTGGTCT 920
      ::::|::|::|:
      5 UUUUCUUGGACU 17

RESULT 218
NA18975
) AAA18975 standard; RNA; 17 BP.
)
) AAA18975;
)
)
) 19-JUN-2000 (first entry)
) Human TIE-2 substrate sequence SEQ ID NO:2201.
)
) Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
) integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
) hammerhead ribozyme; angiogenic factor; cytosolic; antidiabetic;
) ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
) dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
) age related macular degeneration; inflammation; neovascular glaucoma;
) myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
) tuberos scleriosis; pot-wine stain; Sturge Weber syndrome;
) Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
)
) Homo sapiens.
) WO9950403-A2.
)
) 07-OCT-1999.
)
) 24-MAR-1999; 99WO-US006507.
)
) 27-MAR-1998; 98US-0079678P.
)
) (RIBO-) RIBOZYME PHARM INC.
)
) Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;
) WPI; 1999-591315/50.
)
) Novel ribozymes for modulating the synthesis, expression and/or stability
) of an mRNA encoding an angiogenic factors.
)
) Claim 56; Page 128; 305pp; English.
)
) The present invention describes enzymatic nucleic acid molecules with RNA
) cleaving activity, which specifically cleave RNA encoded by an aryl
) hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
) gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
) AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
) and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
) corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
) AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
) and AAA19155 to AAA19222 represent their corresponding target sequences;
) AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
) sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
) AAA21596 to AAA21688 represent their corresponding target sequences;
) AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence
) for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
) AAA23422 represent their corresponding target sequences. The ribozymes of
) the invention are used for modulating the synthesis, expression and/or
) stability of an mRNA encoding angiogenic factor, especially ARNT,
) integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
) especially used to treat cancer, diabetic retinopathy, age related
) macular degeneration (ARMD), inflammation, and arthritis, as well as
) neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
) syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
) and other syndromes and diseases related to the levels of ARNT, Tie-2,
) integrin subunit alpha-6, or integrin subunit beta-3
)
) Sequence 17 BP; 3 A; 6 C; 0 G; 0 T; 8 U; 0 Other;

```

```

Query Match      15.6%; Score 11.4; DB 1; Length 17;
Best Local Similarity 46.2%; Pred. No. 7.3e+02;
Matches 6; Conservative 6; Mismatches 1; Indels 0; Gaps 0;

QY      924 CCTTTTATCCCTC 936
      |::|::|::|:
      4 CAUUUAUCCUC 16

Db

RESULT 219
AAA20483
ID AAA20483 standard; RNA; 17 BP.
XX
XX AAA20483;
XX
XX 19-JUN-2000 (first entry)
XX Integrin alpha 6 subunit substrate sequence SEQ ID NO:3709.
XX
XX Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
XX integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
XX hammerhead ribozyme; angiogenic factor; cytosolic; antidiabetic;
XX ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
XX dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
XX age related macular degeneration; inflammation; neovascular glaucoma;
XX myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
XX tuberos scleriosis; pot-wine stain; Sturge Weber syndrome;
XX Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
XX
XX Homo sapiens.
XX WO9950403-A2.
XX
XX 07-OCT-1999.
XX
XX 24-MAR-1999; 99WO-US006507.
XX
XX 27-MAR-1998; 98US-0079678P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;
XX WPI; 1999-591315/50.
XX
XX Novel ribozymes for modulating the synthesis, expression and/or stability
XX of an mRNA encoding an angiogenic factors.
XX
XX Claim 55; Page 148; 305pp; English.
XX
XX The present invention describes enzymatic nucleic acid molecules with RNA
XX cleaving activity, which specifically cleave RNA encoded by an aryl
XX hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
XX gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
XX AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
XX and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
XX corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
XX AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
XX and AAA19155 to AAA19222 represent their corresponding target sequences;
XX AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
XX sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
XX AAA21596 to AAA21688 represent their corresponding target sequences;
XX AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence
XX for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
XX AAA23422 represent their corresponding target sequences. The ribozymes of
XX the invention are used for modulating the synthesis, expression and/or
XX stability of an mRNA encoding angiogenic factor, especially ARNT,
XX integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
XX especially used to treat cancer, diabetic retinopathy, age related
XX macular degeneration (ARMD), inflammation, and arthritis, as well as
XX neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
XX angiofibroma of tuberous scleriosis, pot-wine stains, Sturge Weber

```


CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
CC and other syndromes and diseases related to the levels of ARNT, Tie-2,
CC integrin subunit alpha-6, or integrin subunit beta-3
XX
SQ Sequence 17 BP; 2 A; 3 C; 3 G; 0 T; 9 U; 0 Other;
Query Match 15.6%; Score 11.4; DB 1; Length 17;
Best Local Similarity 30.8%; Pred. No. 7.3e+02;
Matches 4; Conservative 8; Mismatches 1; Indels 0; Gaps 0;
QY 908 TTTTCTTGTGCTT 920
Db ::::|:::| |:
3 UUUUCUUUGGACU 15
RESULT 220
ABK02835
ID ABK02835 standard; RNA; 17 BP.
XX
AC ABK02835;
XX
DT 12-MAR-2002 (first entry)
XX
DE Human CD20 Hammerhead ribozyme #134.
XX
KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
KW cerebroprotective; nootropic; neuroprotective; antiparkinsonian;
KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
KW DNazyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
KW inflammatory arthropathy; central nervous system injury;
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
KW Parkinson's disease; ataxia; Huntington's disease;
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX
OS Homo sapiens.
OS Synthetic.
XX
PW WO200159103-A2.
XX
PD 16-AUG-2001.
XX
PF 09-FEB-2001; 2001WO-US004273.
XX
PR 11-FEB-2000; 2000US-0181797P.
PR 28-FEB-2000; 2000US-0185516P.
PR 06-MAR-2000; 2000US-0187128P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J.
PA (CHOW/) CHOWRIRA B.M.
XX
PI Blatt L, Mcswiggen J, Chowrira BM;
XX
LR WPI; 2001-607195/69.
XX
FT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
FT constructs, which down regulate expression of a CD20 gene or neurite
FT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
FT central nervous system injury.
XX
FS Claim 30; Page 142; 200pp; English.
XX
CC The invention relates to a nucleic acid molecule which down regulates
CC expression of a CD20 gene and a nucleic acid molecule which down
CC regulates expression of a neurite growth inhibitor gene (NOGO). The
CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
CC DNazyme) an inozyme (an endolytic nucleic acid cleaving an RNA molecule
CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NVN motif) pr

CC an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA
CC with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA
CC of CD20 in the presence of a divalent cation that is preferably Mg²⁺.
CC Furthermore, it may be contacted with a cell to reduce CD20 activity of
CC the cell and treat a patient having a condition associated with the level
CC of CD20. The treatment may further comprise the use of one or more
CC therapies. In particular, the CD20 targetting nucleic acid may be used to
CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-
CC targetting nucleic acid is used to cleave RNA of the NOGO gene in the
CC presence of a divalent cation that is preferably Mg²⁺. Furthermore, the
CC nucleic acid may be contacted with a cell to reduce NOGO activity of the
CC cell and treat a patient having a condition associated with the level of
CC NOGO. The treatment may further comprise the use of one or more
CC therapies. In particular, the NOGO-targetting nucleic acid may be used to
CC treat central nervous system (CNS) injury and cerebrovascular accident
CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
CC disease, muscular dystrophy, and/or other neurodegenerative disease
CC states which respond to the modulation of NOGO expression. The present
CC sequence is a hammerhead ribozyme of the invention
XX
SQ Sequence 17 BP; 2 A; 4 C; 3 G; 0 T; 8 U; 0 Other;
Query Match 15.6%; Score 11.4; DB 1; Length 17;
Best Local Similarity 38.5%; Pred. No. 7.3e+02;
Matches 5; Conservative 7; Mismatches 1; Indels 0; Gaps 0;
QY 915 TGGTCTTGTGCTT 927
Db :|:|:::|:::|:
5 UGAUCUUUGCCUU 17
RESULT 221
ABK03202
ID ABK03202 standard; RNA; 17 BP.
XX
AC ABK03202;
XX
DT 12-MAR-2002 (first entry)
XX
DE Human CD20 Inozyme #153.
XX
KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
KW cerebroprotective; nootropic; neuroprotective; antiparkinsonian;
KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
KW DNazyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
KW inflammatory arthropathy; central nervous system injury;
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
KW Parkinson's disease; ataxia; Huntington's disease;
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX
OS Homo sapiens.
OS Synthetic.
XX
PW WO200159103-A2.
XX
PD 16-AUG-2001.
XX
PF 09-FEB-2001; 2001WO-US004273.
XX
PR 11-FEB-2000; 2000US-0181797P.
PR 28-FEB-2000; 2000US-0185516P.
PR 06-MAR-2000; 2000US-0187128P.
XX

```
(RIBO-) RIBOZYME PHARM INC.
(BLAT/) BLATT L.
(MCSW/) MCSWIGGEN J.
(CHOW/) CHOWRIRA B M.

Blatt L, Mcswiggen J, Chowrira BM;
WPI; 2001-607195/69.

Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
constructs, which down regulate expression of a CD20 gene or neurite
growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
central nervous system injury.

Claim 30; Page 148; 200pp; English.

The invention relates to a nucleic acid molecule which down regulates
expression of a CD20 gene and a nucleic acid molecule which down
regulates expression of a neurite growth inhibitor gene (NOGO). The
nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
DNAzyme) an Inozyme (an endolytic nucleic acid cleaving an RNA molecule
possessing an NCH motif), a G-cleaver (cleaving RNA with a NIN motif) or
an amberzyme (cleaving RNA with an NGN triplet), a zynzyme (cleaving RNA
with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA
of CD20 in the presence of a divalent cation that is preferably Mg2+.
Furthermore, it may be contacted with a cell to reduce CD20 activity of
the cell and treat a patient having a condition associated with the level
of CD20. The treatment may further comprise the use of one or more
therapies. In particular, the CD20 targeting nucleic acid may be used to
treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
immune thrombocytopenia, and inflammatory arthropathy. The NOGO-
targeting nucleic acid is used to cleave RNA of the NOGO gene in the
presence of a divalent cation that is preferably Mg2+. Furthermore, the
nucleic acid may be contacted with a cell to reduce NOGO activity of the
cell and treat a patient having a condition associated with the level of
NOGO. The treatment may further comprise the use of one or more
therapies. In particular, the NOGO-targeting nucleic acid may be used to
treat central nervous system (CNS) injury and cerebrovascular accident
(CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
disease, muscular dystrophy, and/or other neurodegenerative disease
states which respond to the modulation of NOGO expression. The present
sequence is an inozyme of the invention

Sequence 17 BP; 1 A; 5 C; 3 G; 0 T; 8 U; 0 Other;

Query Match 15.6%; Score 11.4; DB 1; Length 17;
Best Local Similarity 38.5%; Pred. No. 7.3e+02;
Matches 5; Conservative 7; Mismatches 1; Indels 0; Gaps 0;

915 TGGTCTTTCCTT 927
: : : : :
4 UGAUCUUCUUCUU 16

RESULT 222
BK25223
ABK25223 standard; DNA; 17 BP.
ABK25223;
09-APR-2002 (first entry)
Male-sterile plant producing genome altering oligonucleotide #123.
Chromosomal genomic alteration; genome altering oligonucleotide; PCR; ss;
o-methyl modification; DNA modification; phosphorothioate linkage;
DNA repair; DNA alteration; environmental tolerance; hygromycin-B;
abiotic stress tolerance; improved nutritional value; hygromycin; primer;

KW amino acid over production; herbicide resistance; glyphosate resistance;
KW imidazolinone herbicide resistance; sulphonylurea herbicide resistance;
KW porphyric herbicide resistance; triazine resistance; disease resistance;
KW modified oil production; modified starch production; waxy starch;
KW altered floral morphology; male-sterile plant; albino mutant;
KW modified fatty acid content; reduced palmitate production; albino plant;
KW increased stearate production; reduced linolenic acid production;
KW photosynthetic process.
XX
XX Lycopersicon esculentum.
OS Synthetic.
XX
XX WO200192512-A2.
XX
XX 06-DEC-2001.
XX
XX 01-JUN-2001; 2001WO-US017672.
XX
XX 01-JUN-2000; 2000US-0208538P.
PR
XX 30-OCT-2000; 2000US-0244989P.
PR
XX 27-MAR-2001; 2001US-00818875.
PR
XX (UYDE ) UNIV DELAWARE.
PA
XX Kmiec EB, Gamper HB, Rice MC, Kim J;
PI
XX WPI; 2002-106307/14.
DR
XX
XX New oligonucleotides with modified nuclease-resistant termini, useful for
PT creating plants with desired phenotypes, e.g. stress tolerance, improved
PT nutritional value, herbicide or disease resistance, or modified oil
PT production.
XX
XX Claim 7; Page 78; 220pp; English.
XX
XX The invention relates to an oligonucleotide for targeted alteration of a
CC genetic sequence, which comprises a single-stranded oligonucleotide
CC having a DNA domain. The DNA domain has at least one mismatch with
CC respect to the genetic sequence to be altered and further comprises
CC chemical modifications of the oligonucleotide. The chemical modifications
CC consist of o-methyl modification, an RNA modification, two or more
CC phosphorothioate linkages on a terminus, or a combination of any two or
CC more of these modifications. The oligonucleotides are useful for
CC directing repair or alteration of plant genetic information. The
CC oligonucleotides are particularly useful for creating plants with desired
CC phenotypes, e.g. environmental or abiotic stress tolerance, improved
CC nutritional value (e.g. altering amino acid content of plants or
CC conferring amino acid over production), herbicide resistance (e.g.
CC glyphosate resistance, imidazolinone and sulphonylurea herbicide
CC resistance, porphyric herbicide resistance or triazine resistance),
CC disease resistance, modified oil production, modified starch production
CC (e.g. increased starch or production of waxy starch), altered floral
CC morphology (e.g. male-sterile plants) or modified fatty acid content
CC (e.g. reduced palmitate, increased stearate or reduced linolenic acid).
CC The oligonucleotides are also useful for producing albino mutants for the
CC analysis of photosynthetic processes. This sequence represents a genome
CC altering oligonucleotide of the invention
XX
XX Sequence 17 BP; 6 A; 2 C; 1 G; 8 T; 0 U; 0 Other;

Query Match 15.6%; Score 11.4; DB 1; Length 17;
Best Local Similarity 92.3%; Pred. No. 7.3e+02;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 939 CTCCTATGTTTAA 951
||| ||| |||
DB 3 CTCCTATGTTTAA 15

RESULT 223
ABK25224/c
ID ABK25224 standard; DNA; 17 BP.
XX
```

AC ABK25224;
 XX
 DT 09-APR-2002 (first entry)
 XX
 LE Male-sterile plant producing genome altering oligonucleotide #124.
 XX
 XX Chromosomal genomic alteration; genome altering oligonucleotide; PCR; ss;
 KW o-methyl modification; LNA modification; phosphorothioate linkage;
 KW DNA repair; DNA alteration; environmental tolerance; hygromycin-B;
 KW abiotic stress tolerance; improved nutritional value; hygromycin; primer;
 KW amino acid over production; herbicide resistance; glyphosate resistance;
 KW imidazolinone herbicide resistance; sulphonylurea herbicide resistance;
 KW porphyrin herbicide resistance; triazine resistance; disease resistance;
 KW modified oil production; modified starch production; waxy starch;
 KW altered floral morphology; male-sterile plant; albino mutant;
 KW modified fatty acid content; reduced palmitate production; albino plant;
 KW increased stearate production; reduced linolenic acid production;
 KW photosynthetic process.
 XX
 XX Lycopersicon esculentum.
 OS Synthetic.
 XX
 XX WO200192512-A2.
 XX
 XX 06-DEC-2001.
 XX
 XX 01-JUN-2001; 2001WO-US017672.
 XX
 XX 01-JUN-2000; 2000US-0208538P.
 PR 30-OCT-2000; 2000US-0244989P.
 PR 27-MAR-2001; 2001US-00818875.
 XX
 XX (UYDE) UNIV. DELAWARE.
 PA
 XX
 PI Kmiec EB, Gamper HB, Rice MC, Kim J;
 XX
 XX WPI; 2002-106307/14.
 DR
 XX
 XX New oligonucleotides with modified nuclease-resistant termini, useful for
 PT creating plants with desired phenotypes, e.g. stress tolerance, improved
 PT nutritional value, herbicide or disease resistance, or modified oil
 PT production.
 PS
 PS Claim 7; Page 78; 220pp; English.
 XX
 XX The invention relates to an oligonucleotide for targeted alteration of a
 CC genetic sequence, which comprises a single-stranded oligonucleotide
 CC having a DNA domain. The DNA domain has at least one mismatch with
 CC respect to the genetic sequence to be altered and further comprises
 CC chemical modifications of the oligonucleotide. The chemical modifications
 CC consist of o-methyl modification, an LNA modification, two or more
 CC phosphorothioate linkages on a terminus, or a combination of any two or
 CC more of these modifications. The oligonucleotides are useful for
 CC directing repair or alteration of plant genetic information. The
 CC oligonucleotides are particularly useful for creating plants with desired
 CC phenotypes, e.g. environmental or abiotic stress tolerance, improved
 CC nutritional value (e.g. altering amino acid content of plants or
 CC conferring amino acid over production), herbicide resistance (e.g.
 CC glyphosate resistance, imidazolinone and sulphonylurea herbicide
 CC resistance, porphyrin herbicide resistance or triazine resistance),
 CC disease resistance, modified oil production, modified starch production
 CC (e.g. increased starch or production of waxy starch), altered floral
 CC morphology (e.g. male-sterile plants) or modified fatty acid content
 CC (e.g. reduced palmitate, increased stearate or reduced linolenic acid).
 CC The oligonucleotides are also useful for producing albino mutants for the
 CC analysis of photosynthetic processes. This sequence represents a genome
 CC altering oligonucleotide of the invention
 XX
 XX Sequence 17 BP; 8 A; 1 C; 2 G; 6 T; 0 U; 0 Other;
 SQ

QY 939 CTTCAATTGGTTTA 951
 DB ||||| |||||
 15 CTTCAATTAGTTTA 3
 RESULT 224
 ABV83099/C
 ID ABV83099 standard; DNA; 17 BP.
 XX
 XX AC ABV83099;
 XX
 XX 03-JAN-2003 (first entry)
 DT
 XX Human HTPL scanning oligonucleotide SEQ ID 4345.
 DE
 XX Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
 KW human testis expressed Patched like protein; testis; adrenal; liver;
 KW male germ cell development; bone marrow; brain; kidney; lung; placenta;
 KW prostate; skeletal muscle; colon; male infertility; cancer; ss.
 KW
 XX Homo sapiens.
 OS
 XX EP1229046-A2.
 PN
 XX
 XX 07-AUG-2002.
 PD
 XX
 XX 28-JAN-2002; 2002EP-00001167.
 PF
 XX
 XX 30-JAN-2001; 2001WO-US000663.
 PR 30-JAN-2001; 2001WO-US000664.
 PR 30-JAN-2001; 2001WO-US000665.
 PR 30-JAN-2001; 2001WO-US000667.
 PR 30-JAN-2001; 2001WO-US000668.
 PR 30-JAN-2001; 2001WO-US000669.
 PR 23-MAY-2001; 2001US-00864761.
 PR 09-OCT-2001; 2001US-0327898P.
 XX
 XX (AEOM-) ABOMICA INC.
 PA
 XX
 XX Zhan J;
 PI
 XX
 XX WPI; 2002-676582/73.
 DR
 XX
 XX Novel isolated human testis expressed Patched like protein (HTPL), useful
 PT for identifying agonist and antagonist and specific binding partners, and
 PT for treating subjects having defects in HTPL.
 XX
 XX Example 2; Page 633; 718pp; English.
 CC
 CC The present invention relates to human testis expressed Patched like
 CC protein (HTPL, see ABV78759 to ABV78762 and ABV98519 to ABV98520). HTPL
 CC has two isoforms, with a few single base pair differences between the
 CC two. One of the single base pair changes introduces a premature stop
 CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
 CC shares an overall structure organisation with the Patched protein. The
 CC shared structural features strongly imply that HTPL plays a role similar
 CC to that of Patched, and is a potential tumour suppressor. HTPL is
 CC important in regulating male germ cell development, and the HTPL gene was
 CC mapped to human chromosome 10p12.1. HTPL and its coding sequence are
 CC useful for diagnosing a disorder caused by mutation in HTPL, and in
 CC therapy and manufacture of a medicament for treatment or prevention of
 CC such disorder associated with decreased expression or activity of human
 CC HTPL. Such disorders include disorders of testis, or adrenal, adult and
 CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
 CC skeletal muscle or colon function. HTPL proteins and nucleic acids are
 CC clinically useful diagnostic markers and potential therapeutic agents for
 CC male infertility and cancer. The present oligonucleotide was used in an
 CC example from the invention
 XX
 XX Sequence 17 BP; 7 A; 4 C; 2 G; 4 T; 0 U; 0 Other;
 SQ

Query Match 15.6%; Score 11.4; DB 1; Length 17;
 Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```
Best Local Similarity 92.3%; Pred. No. 7.3e+02;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

    914 TTGGTCTTTCCT 926
    13 TTGGCTTTGACT 1

RESULT 225
CS53051
) ACC53051 standard; DNA; 17 BP.
)
) ACC53051;
) 27-JUN-2003 (first entry)
) Human tumour suppressor sequence #1818.
)
) ss; tumour suppressor; antitumour; cytostatic; tumour suppression;
) tumour regression; apoptosis; virus resistance; diagnosis;
) cellular degeneration.
) Homo sapiens.
) FR2826373-A1.
) 27-DEC-2002.
)
) 20-JUN-2001; 2001FR-00008139.
)
) ACC53051;
) 27-JUN-2003 (first entry)
) Human tumour suppressor sequence #1818.
)
) ss; tumour suppressor; antitumour; cytostatic; tumour suppression;
) tumour regression; apoptosis; virus resistance; diagnosis;
) cellular degeneration.
) Homo sapiens.
) FR2826373-A1.
) 27-DEC-2002.
)
) 20-JUN-2001; 2001FR-00008139.
)
) 20-JUN-2001; 2001FR-00008139.
) (MOLE-) MOLECULAR ENGINES LAB SA.
) Tuijnder M, Telerman A, Amson R;
) WPI; 2003-250498/25.
) New nucleic acid sequences associated with tumor suppression, regression,
) apoptosis or virus resistance are useful to diagnose and treat viral
) disease, development of tumor cells and cell degeneration.
) Claim 1; Page 460; 798pp; French.
) This sequence represents an isolated nucleic acid sequence associated
) with tumour suppression or regression, apoptosis or virus resistance. The
) invention relates to these sequences or sequences having at least 80%
) identity to them, and polypeptides encoded by the sequences or
) polypeptides having 80% identity to the polypeptide sequences. The
) invention is used to diagnose or treat viral disease or disease
) characterized by development of tumour cells or cellular degeneration
) Sequence 17 BP; 4 A; 5 C; 2 G; 6 T; 0 U; 0 Other;
)
) Query Match 15.6%; Score 11.4; DB 1; Length 17;
) Best Local Similarity 92.3%; Pred. No. 7.3e+02;
) Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
)
) Claim 1; Page 460; 798pp; French.
) This sequence represents an isolated nucleic acid sequence associated
) with tumour suppression or regression, apoptosis or virus resistance. The
) invention relates to these sequences or sequences having at least 80%
) identity to them, and polypeptides encoded by the sequences or
) polypeptides having 80% identity to the polypeptide sequences. The
) invention is used to diagnose or treat viral disease or disease
) characterized by development of tumour cells or cellular degeneration
) Sequence 17 BP; 4 A; 5 C; 2 G; 6 T; 0 U; 0 Other;
)
) Query Match 15.6%; Score 11.4; DB 1; Length 17;
) Best Local Similarity 92.3%; Pred. No. 7.3e+02;
) Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
)
) 935 TCCTCTTCATTGG 947
) 3 TCCTCTTCATTGG 15
)
) SULT 226
) CS54365
) ACC54365 standard; DNA; 17 BP.
)
) ACC54365;
) 27-JUN-2003 (first entry)
) Human tumour suppressor sequence #3132.
)
) ss; tumour suppressor; antitumour; cytostatic; tumour suppression;
) tumour regression; apoptosis; virus resistance; diagnosis;
) cellular degeneration.
) Homo sapiens.
) FR2826373-A1.
) 27-DEC-2002.
)
) 20-JUN-2001; 2001FR-00008139.
)
) ACC54365;
) 27-JUN-2003 (first entry)
) Human tumour suppressor sequence #3132.
)
) ss; tumour suppressor; antitumour; cytostatic; tumour suppression;
) tumour regression; apoptosis; virus resistance; diagnosis;
) cellular degeneration.
) Homo sapiens.
) FR2826373-A1.
) 27-DEC-2002.
)
) 20-JUN-2001; 2001FR-00008139.
)
) 20-JUN-2001; 2001FR-00008139.
) (MOLE-) MOLECULAR ENGINES LAB SA.
) Tuijnder M, Telerman A, Amson R;
) WPI; 2003-250498/25.
) New nucleic acid sequences associated with tumor suppression, regression,
) apoptosis or virus resistance are useful to diagnose and treat viral
) disease, development of tumor cells and cell degeneration.
) Claim 1; Page 763; 798pp; French.
) This sequence represents an isolated nucleic acid sequence associated
) with tumour suppression or regression, apoptosis or virus resistance. The
) invention relates to these sequences or sequences having at least 80%
) identity to them, and polypeptides encoded by the sequences or
) polypeptides having 80% identity to the polypeptide sequences. The
) invention is used to diagnose or treat viral disease or disease
) characterized by development of tumour cells or cellular degeneration
) Sequence 17 BP; 2 A; 5 C; 3 G; 7 T; 0 U; 0 Other;
)
) Query Match 15.6%; Score 11.4; DB 1; Length 17;
) Best Local Similarity 92.3%; Pred. No. 7.3e+02;
) Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
)
) QY 935 TCCTCTTCATTGG 947
) 3 TCCTCTTCATTGG 15
)
) DB
)
) RESULT 227
) ACC52797
) ID ACC52797 standard; DNA; 17 BP.
) AC ACC52797;
) XX
) DT 27-JUN-2003 (first entry)
) XX
) DE Human tumour suppressor sequence #1564.
) XX
) ss; tumour suppressor; antitumour; cytostatic; tumour suppression;
) tumour regression; apoptosis; virus resistance; diagnosis;
) cellular degeneration.
) Homo sapiens.
) FR2826373-A1.
) 27-DEC-2002.
)
) 20-JUN-2001; 2001FR-00008139.
)
) 20-JUN-2001; 2001FR-00008139.
) (MOLE-) MOLECULAR ENGINES LAB SA.
) Tuijnder M, Telerman A, Amson R;
) XX
```

DR WPI; 2003-250498/25.
 XX
 CC New nucleic acid sequences associated with tumor suppression, regression,
 PT apoptosis or virus resistance are useful to diagnose and treat viral
 PT disease, development of tumor cells and cell degeneration.
 XX
 CC Claim 1; Page 401; 798pp; French.
 XX
 CC This sequence represents an isolated nucleic acid sequence associated
 CC with tumor suppression or regression, apoptosis or virus resistance. The
 CC invention relates to these sequences or sequences having at least 80%
 CC identity to them, and polypeptides encoded by the sequences or
 CC polypeptides having 80% identity to the polypeptide sequences. The
 CC invention is used to diagnose or treat viral disease or disease
 CC characterized by development of tumour cells or cellular degeneration
 XX
 CC Sequence 17 BP; 3 A; 6 C; 2 G; 6 T; 0 U; 0 Other;
 SQ
 Query Match 15.6%; Score 11.4; DB 1; Length 17;
 Best Local Similarity 92.3%; Pred. No. 7.3e+02;
 Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 930 ATCCCTCTCTCTTC 942
 DB 2 ATCCCTCTCTCTTC 14
 RESULT 228
 ABT39688
 ID ABT39688 standard; DNA; 17 BP.
 XX
 AC ABT39688;
 XX
 XX 12-JUN-2003 (first entry)
 XX
 DE Tumour suppression related human fukutin oligo SEQ ID No 5325.
 XX
 KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
 KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
 KW schizophrenia; protein chip; gene therapy; tumour suppression;
 KW human fukutin; ds.
 XX
 OS Homo sapiens.
 XX
 PN WO2003025175-A2.
 XX
 PD 27-MAR-2003.
 XX
 PF 17-SEP-2002; 2002WO-IB004208.
 XX
 PR 17-SEP-2001; 2001FR-00011978.
 XX
 PA (MOLE-) MOLECULAR ENGINES LAB.
 XX
 PI Telerman A, Amson R, Tuijnder M;
 XX
 WPI; 2003-313353/30.
 XX
 CC New isolated nucleic acid, useful for treating viral diseases associated
 PT with tumors and cell degeneration, also related polypeptides, antibodies
 PT and transfected cells.
 XX
 PS Disclosure; Page 656; 720pp; French.
 XX
 CC The invention relates to a novel isolated 17 mer nucleic acid sequence,
 CC given in the specification, a sequence containing at least 15 consecutive
 CC nucleotides from the 17 mer sequence, a sequence with, after optimal
 CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that
 CC hybridizes to them under highly stringent conditions, or the complement
 CC of any of them, or the corresponding RNA. The novel isolated nucleic
 CC acids of the invention are useful as probes and primers for detecting,
 CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
 CC component of a gene chip, in vitro as (anti)sense reagents, and for
 CC production of recombinant polypeptides. Any of the nucleic acids,
 CC polypeptides, vectors containing the nucleic acids, cells containing the

CC production of recombinant polypeptides. Any of the nucleic acids,
 CC polypeptides, vectors containing the nucleic acids, cells containing the
 CC vector or antibodies directed against the polypeptides are useful for
 CC preparation of pharmaceuticals for prevention and/or treatment of viral
 CC diseases that are characterised by development of tumours or cell
 CC degeneration, specifically cancer but also Alzheimer's disease and
 CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
 CC patient samples is useful for diagnosis and/or prognosis of these
 CC diseases. The polypeptides can also be used to generate antibodies, and
 CC both the polypeptide and antibodies are useful as components of protein
 CC chips. The nucleic acid sequences of the invention can be used in gene
 CC therapy. This polynucleotide sequence represents a tumour suppression
 CC related human fukutin oligonucleotide of the invention
 XX
 SQ Sequence 17 BP; 4 A; 5 C; 2 G; 6 T; 0 U; 0 Other;
 Query Match 15.6%; Score 11.4; DB 1; Length 17;
 Best Local Similarity 92.3%; Pred. No. 7.3e+02;
 Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 935 TCCTCTTCATGG 947
 DB 3 TCCTCTTCATGG 15
 RESULT 229
 ABT37482/C
 ID ABT37482 standard; DNA; 17 BP.
 XX
 AC ABT37482;
 XX
 XX 12-JUN-2003 (first entry)
 XX
 DE Tumour suppression related human fukutin oligo SEQ ID No 3119.
 XX
 KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
 KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
 KW schizophrenia; protein chip; gene therapy; tumour suppression;
 KW human fukutin; ds.
 XX
 OS Homo sapiens.
 XX
 PN WO2003025175-A2.
 XX
 PD 27-MAR-2003.
 XX
 PF 17-SEP-2002; 2002WO-IB004208.
 XX
 PR 17-SEP-2001; 2001FR-00011978.
 XX
 PA (MOLE-) MOLECULAR ENGINES LAB.
 XX
 PI Telerman A, Amson R, Tuijnder M;
 XX
 WPI; 2003-313353/30.
 XX
 CC New isolated nucleic acid, useful for treating viral diseases associated
 PT with tumors and cell degeneration, also related polypeptides, antibodies
 PT and transfected cells.
 XX
 PS Disclosure; Page 398; 720pp; French.
 XX
 CC The invention relates to a novel isolated 17 mer nucleic acid sequence,
 CC given in the specification, a sequence containing at least 15 consecutive
 CC nucleotides from the 17 mer sequence, a sequence with, after optimal
 CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that
 CC hybridizes to them under highly stringent conditions, or the complement
 CC of any of them, or the corresponding RNA. The novel isolated nucleic
 CC acids of the invention are useful as probes and primers for detecting,
 CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
 CC component of a gene chip, in vitro as (anti)sense reagents, and for
 CC production of recombinant polypeptides. Any of the nucleic acids,
 CC polypeptides, vectors containing the nucleic acids, cells containing the

vector or antibodies directed against the polypeptides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia. Analysis of the expression of the 17 mer nucleic acids in patient samples is useful for diagnosis and/or prognosis of these diseases. The polypeptides can also be used to generate antibodies, and both the polypeptide and antibodies are useful as components of protein chips. The nucleic acid sequences of the invention can be used in gene therapy. This polynucleotide sequence represents a tumour suppression related human fukutin oligonucleotide of the invention

Sequence 17 BP; 8 A; 2 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 15.6%; Score 11.4; DB 1; Length 17;
Best Local Similarity 92.3%; Pred. No. 7.3e+02;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
919 CTTTGCCCTTTAT 931
|||||||
17 CTTTGCCCTTTAT 5

RESULT 230

ACDS0660 standard; RNA; 17 BP.

ACDS0660;

23-SEP-2003 (first entry)

HBV hammerhead ribozyme substrate sequence #177.

Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
RNA stability; RNA expression; RNA synthesis; antisense;
enzymatic nucleic acid; hammerhead ribozyme; DNzyme; inozyme; zinzyme;
ambrzyme; G-cleaver ribozyme; decoy molecule; aptamer;
HBV reverse transcriptase; Enhancer I region; viral replication;
degenerative; disease state; HBV infection; HCV infection; cirrhosis;
liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
virucide; antiinflammatory; substrate; ss.

Hepatitis B virus.

WO200281494-A1.

17-OCT-2002.

26-MAR-2002; 2002WO-US009187.

26-MAR-2001; 2001US-00817879.

08-JUN-2001; 2001US-00877478.

08-JUN-2001; 2001US-0296876P.

24-OCT-2001; 2001US-0335059P.

05-DEC-2001; 2001US-0337055P.

(RIBO-) RIBOZYME PHARM INC.

(BLAT/) BLATT L.

(MACE/) MACEJAK D.

(MCSW/) MCSWIGGEN J.

(MORR/) MORRISSEY D.

(PAVC/) PAVCO P.

(LEEF/) LEE P.

(DRAP/) DRAPER K.

(ROBE/) ROBERTS E.

Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;

Draper K, Roberts E;

WPI; 2003-229207/22.

Novel compound useful for treating cirrhosis, liver failure,
hepatocellular carcinoma, or condition associated with hepatitis C virus

infection.

Example 1; Page 139; 387pp; English.

The present invention relates to nucleic acid molecules which modulate the synthesis, expression and/or stability of Hepatitis C virus (HCV) or Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense and enzymatic nucleic acids such as hammerhead ribozymes, DNzymes, inozymes, zinzymes, ambrzymes, and G-cleaver ribozymes. Also disclosed are nucleic acid decoy molecules and aptamers that bind to HBV reverse transcriptase and/or HBV reverse transcriptase primer sequences, as well as oligonucleotides that specifically bind the Enhancer I region of HBV DNA. The nucleic acids may be used to modulate the expression of HBV genes and HBV viral replication. Also disclosed is a method for screening compounds and/or potential therapies directed against HBV, and compounds that modulate the expression and/or replication of HCV. The compounds and methods of the invention are useful for the treatment of degenerative and disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepatocellular carcinoma. The present sequence represents a substrate for one of the HBV ribozyme, inozyme, G-cleaver, zinzyme, DNzyme or ambrzyme sequences disclosed in the present invention

Sequence 17 BP; 3 A; 4 C; 1 G; 0 T; 9 U; 0 Other;

Query Match 15.6%; Score 11.4; DB 1; Length 17;

Best Local Similarity 30.8%; Pred. No. 7.3e+02;

Matches 4; Conservative 8; Mismatches 1; Indels 0; Gaps 0;

QY 907 ATTTCTTTGGTC 919

|||||

Db 5 AUUUUUUUUGUC 17

RESULT 231

ACDS0665

ID ACDS0665 standard; RNA; 17 BP.

AC ACDS0665;

DT 23-SEP-2003 (first entry)

HBV hammerhead ribozyme substrate sequence #182.

Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
RNA stability; RNA expression; RNA synthesis; antisense;
enzymatic nucleic acid; hammerhead ribozyme; DNzyme; inozyme; zinzyme;
ambrzyme; G-cleaver ribozyme; decoy molecule; aptamer;
HBV reverse transcriptase; Enhancer I region; viral replication;
degenerative; disease state; HBV infection; HCV infection; cirrhosis;
liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
virucide; antiinflammatory; substrate; ss.

Hepatitis B virus.

WO200281494-A1.

17-OCT-2002.

26-MAR-2002; 2002WO-US009187.

26-MAR-2001; 2001US-00817879.

08-JUN-2001; 2001US-00877478.

08-JUN-2001; 2001US-0296876P.

24-OCT-2001; 2001US-0335059P.

05-DEC-2001; 2001US-0337055P.

(RIBO-) RIBOZYME PHARM INC.

(BLAT/) BLATT L.

(MACE/) MACEJAK D.

(MCSW/) MCSWIGGEN J.

(MORR/) MORRISSEY D.

(PAVC/) PAVCO P.

PA (LEEP/) LEE P.
PA (DRAP/) DRAPER K.
PA (ROBE/) ROBERTS E.
XX
PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
PI Draper K, Roberts E;
XX
DR WPI; 2003-229207/22.
XX
XX Novel compound useful for treating cirrhosis, liver failure,
PT hepatocellular carcinoma, or condition associated with hepatitis C virus
PT infection.
XX
XX Example 1; Page 139; 387pp; English.
XX
CC The present invention relates to nucleic acid molecules which modulate
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
CC inozymes, zinzymes, amberyms, and G-cleaver ribozymes. Also disclosed
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC as oligonucleotides that specifically bind the Enhancer I region of HBV
CC DNA. The nucleic acids may be used to modulate the expression of HBV
CC genes and HBV viral replication. Also disclosed is a method for screening
CC compounds and/or potential therapies directed against HBV, and compounds
CC that modulate the expression and/or replication of HCV. The compounds and
CC methods of the invention are useful for the treatment of degenerative and
CC disease states related to HBV and HCV infection, replication and gene
CC expression such as cirrhosis, liver failure, and hepatocellular
CC carcinoma. The present sequence represents a substrate for one of the HBV
CC ribozyme, inozyme, G-cleaver, zinzyme, DNazyme or amberyms sequences
CC disclosed in the present invention
XX
SQ Sequence 17 BP; 1 A; 2 C; 4 G; 0 T; 10 U; 0 Other;
XX
Query Match 15.6%; Score 11.4; DB 1; Length 17;
Best Local Similarity 30.8%; Pred. No. 7.3e+02;
Matches 4; Conservative 8; Mismatches 1; Indels 0; Gaps 0;
CY 911 TCCTTGGTCTTTG 923
Cb 1 UCUCUUGUCUUG 13
XX
RESULT 232
ACC64925
ID ACC64925 standard; DNA; 17 BP.
XX
ACC64925;
XX
XX 01-JUL-2003 (first entry)
XX
XX Murine oligonucleotide associated with tumour suppression, SEQ ID 2172.
XX
XX Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;
KW tumour suppression; tumour reversion; apoptosis; virus resistance;
KW viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrenia; ss.
XX
XX Mus musculus.
XX
XX WO2003025176-A2.
XX
PD 27-MAR-2003.
XX
PF 17-SEP-2002; 2002WO-IB004210.
XX
XX 17-SEP-2001; 2001FR-00011979.
XX
XX (MOLE-) MOLECULAR ENGINES LAB.
XX
XX Telerman A, Amson R, Tuijnder M;
PI

XX WPI; 2003-333167/31.
XX
XX New isolated nucleic acid, useful for treating viral diseases associated
PT with tumors and cell degeneration, also related polypeptides, antibodies
PT and transfected cells.
XX
XX Disclosure; Page 285; 738pp; French.
XX
XX The present invention relates to murine oligonucleotides (ACC62754-
CC ACC6806), which are associated with tumour suppression, tumour
CC reversion, apoptosis and virus resistance. The oligonucleotides are
CC useful as (1) as probes and primers for detecting, identifying,
CC quantifying and/or amplifying nucleic acid, e.g. as one component of a
CC gene chip; in vitro as (anti)sense reagents; and (2) for production of a
CC recombinant polypeptides. The oligonucleotides are useful for preparation
CC of pharmaceuticals for prevention and/or treatment of viral diseases that
CC are characterised by development of tumours or cell degeneration,
CC specifically cancer but also Alzheimer's disease and schizophrenia
XX
SQ Sequence 17 BP; 3 A; 6 C; 1 G; 7 T; 0 U; 0 Other;
XX
Query Match 15.6%; Score 11.4; DB 1; Length 17;
Best Local Similarity 92.3%; Pred. No. 7.3e+02;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
CY 933 CCTCCTCTTTCATT 945
Cb 4 CCTCATCTTTCATT 16
XX
RESULT 233
ADB44108
ID ADB44108 standard; DNA; 17 BP.
XX
XX ADB44108;
XX
XX 18-DEC-2003 (revised)
DT 04-DEC-2003 (first entry)
XX
XX Tumour suppression/reversion associated nucleotide #4431.
XX
XX cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
KW primer; probe; tumour suppression; tumour reversion; apoptosis;
KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
KW diagnosis.
XX
XX Homo sapiens.
XX
XX WO2003040369-A2.
XX
XX 15-MAY-2003.
XX
XX 17-SEP-2002; 2002WO-IB004219.
XX
XX 17-SEP-2001; 2001FR-00011981.
XX
XX (MOLE-) MOLECULAR ENGINES LAB.
XX
XX Telerman A, Amson R, Tuijnder M;
XX
XX WPI; 2003-441574/41.
XX
XX New nucleic acid encoding human prostate membrane-specific antigen,
PT useful e.g. for treatment of tumors and viral infection, also related
PT polypeptide and antibodies.
XX
XX Disclosure; Page 550; 771pp; French.
XX
XX The invention relates to the isolation of 6327 nucleotide sequences,
CC fragments of at least 15 consecutive nucleotides of these nucleotides, a
CC sequence having at least 80% identity, after optimal alignment, with the
CC nucleotides, a sequence that hybridizes under stringent conditions with

the nucleotides, or the complement, or corresponding RNA, of the nucleotides. The nucleotides are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours or cell degeneration (e.g. Alzheimer's disease or schizophrenia). Analysis of the expression of the nucleotides can be used for diagnosis and/or prognosis of these diseases. The nucleotides and polypeptides can also be used to screen for their specific interactive molecules, potentially useful for treating diseases associated with abnormal expression of the nucleotides.

Sequence 17 BP; 2 A; 2 C; 5 G; 8 T; 0 U; 0 Other;

Query Match 15.6%; Score 11.4; DB 1; Length 17;

Best Local Similarity 92.3%; Pred. No. 7.3e+02;

Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

911 TCTTTGGTCTTGG 923

|||||

3 TCTTTGGTCTTGG 15

RESULT 234

ADB42008/C

ADB42008 standard; DNA; 17 BP.

ADB42008;

18-DEC-2003 (revised)

04-DEC-2003 (first entry)

Tumour suppression/reversion associated nucleotide #2331.

cytostatic; antiviral; neuroprotective; nontropic; neuroleptic; ss;

primer; probe; tumour suppression; tumour reversion; apoptosis;

virus resistance; transgenic animals; Alzheimer's disease; schizophrenia; diagnosis.

Homo sapiens.

WO2003040369-A2.

15-MAY-2003.

17-SEP-2002; 2002WO-IB004219.

17-SEP-2001; 2001FR-00011981.

(MOLE-) MOLECULAR ENGINES LAB.

Telerman A, Amson R, Tuijnder M;

WPI; 2003-441574/41.

New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.

Disclosure; Page 304; 771pp; French.

The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the nucleotides. The nucleotides are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleic acids, as in vitro

sense and antisense sequences, of nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours or cell degeneration (e.g. Alzheimer's disease or schizophrenia). Analysis of the expression of the nucleotides can be used for diagnosis and/or prognosis of these diseases. The nucleotides and polypeptides can also be used to screen for their specific interactive molecules, potentially useful for treating diseases associated with abnormal expression of the nucleotides.

Sequence 17 BP; 9 A; 3 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 15.6%; Score 11.4; DB 1; Length 17;

Best Local Similarity 92.3%; Pred. No. 7.3e+02;

Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 905 TCATTTTCTTGG 917

|||||

16 TCATTTGCTTGG 4

RESULT 235

ADB45411

ID ADB45411 standard; DNA; 17 BP.

AC ADB45411;

18-DEC-2003 (first entry)

Tumour suppression/reversion associated nucleotide #5734.

cytostatic; antiviral; neuroprotective; nontropic; neuroleptic; ss;

primer; probe; tumour suppression; tumour reversion; apoptosis;

virus resistance; transgenic animals; Alzheimer's disease; schizophrenia; diagnosis.

Homo sapiens.

WO2003040369-A2.

15-MAY-2003.

17-SEP-2002; 2002WO-IB004219.

17-SEP-2001; 2001FR-00011981.

(MOLE-) MOLECULAR ENGINES LAB.

Telerman A, Amson R, Tuijnder M;

WPI; 2003-441574/41.

New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.

Disclosure; Page 702; 771pp; French.

The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the nucleotides. The nucleotides are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and

CC cells containing the vectors), the encoded polypeptides and antibodies
 CC (Ab) against the polypeptide are useful for prevention and/or treatment
 CC of viral infections or diseases characterized by development of tumours
 CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
 CC Analysis of the expression of the nucleotides can be used for diagnosis
 CC and/or prognosis of these diseases. The nucleotides and polypeptides can
 CC also be used to screen for their specific interactive molecules,
 CC potentially useful for treating diseases associated with abnormal
 CC expression of the nucleotides.
 SQ Sequence 17 BP; 5 A; 3 C; 1 G; 8 T; 0 U; 0 Other;
 Query Match 15.6%; Score 11.4; DB 1; Length 17;
 Best Local Similarity 92.3%; Pred. No. 7.3e+02;
 Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 Q/ 903 GGTCATTTCTTT 915
 | | | | | | | | | |
 Db 1 GATCATTTCTTT 13
 RESULT 236
 ADB4471
 ID ADB44471 standard; DNA; 17 BP.
 XX
 AC ADB44471;
 XX
 DT 18-DEC-2003 (first entry)
 XX
 DE Tumour suppression/reversion associated nucleotide #4794.
 XX
 KW cytostatic; antiviral; neuroprotective; nontropic; neuroleptic; ss;
 KW primer; probe; tumour suppression; tumour reversion; apoptosis;
 KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
 KW diagnosis.
 XX
 OS Homo sapiens.
 XX
 PN WO2003040369-A2.
 XX
 PJ 15-MAY-2003.
 XX
 PF 17-SEP-2002; 2002WO-IB004219.
 XX
 PX 17-SEP-2001; 2001FR-00011991.
 XX
 PA (MOLE-) MOLECULAR ENGINES LAB.
 XX
 PI Telerman A, Amson R, Tuijnder M;
 XX
 DR WPI; 2003-441574/41.
 XX
 PT New nucleic acid encoding human prostate membrane-specific antigen,
 PT useful e.g. for treatment of tumors and viral infection, also related
 PT polypeptide and antibodies.
 XX
 PS Disclosure; Page 592; 771pp; French.
 XX
 CC The invention relates to the isolation of 6327 nucleotide sequences,
 CC fragments of at least 15 consecutive nucleotides of these nucleotides, a
 CC sequence having at least 80% identity, after optimal alignment, with the
 CC nucleotides, a sequence that hybridizes under stringent conditions with
 CC the nucleotides, or the complement, or corresponding RNA, of the
 CC nucleotides. The nucleotides are used as probes or primers for detecting,
 CC identifying, quantifying and/or amplifying nucleic acids, as in vitro
 CC sense and antisense sequences, of nucleotides involved in tumour
 CC suppression or reversion, apoptosis and/or viral resistance, to produce
 CC recombinant polypeptides, and to prepare transgenic animals, as
 CC experimental models. The nucleotides (also vectors containing them and
 CC cells containing the vectors), the encoded polypeptides and antibodies
 CC (Ab) against the polypeptide are useful for prevention and/or treatment
 CC of viral infections or diseases characterized by development of tumours
 CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).

CC Analysis of the expression of the nucleotides can be used for diagnosis
 CC and/or prognosis of these diseases. The nucleotides and polypeptides can
 CC also be used to screen for their specific interactive molecules,
 CC potentially useful for treating diseases associated with abnormal
 CC expression of the nucleotides.
 SQ Sequence 17 BP; 4 A; 5 C; 2 G; 6 T; 0 U; 0 Other;
 Query Match 15.6%; Score 11.4; DB 1; Length 17;
 Best Local Similarity 92.3%; Pred. No. 7.3e+02;
 Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 Qy 935 TCCTCTTCATGG 947
 | | | | | | | | | |
 Db 3 TCCTCTTCATGG 15
 RESULT 237
 ADC70411
 ID ADC70411 standard; DNA; 17 BP.
 XX
 AC ADC70411;
 XX
 DT 18-DEC-2003 (first entry)
 XX
 DE Primer oligo used for analysing CpG islands in genomic DNA (SeqID 901).
 XX
 KW PCR; primer; ss; lung cell proliferative disorder; CpG dinucleotide;
 KW adenocarcinoma; squamous cell carcinoma; cytostatic; probe; PNA-oligomer;
 KW cytosine methylation state.
 XX
 OS Unidentified.
 XX
 PN WO2003052135-A2.
 XX
 PD 26-JUN-2003.
 XX
 PF 10-DEC-2002; 2002WO-EP014026.
 XX
 PR 14-DEC-2001; 2001DE-01061625.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Burger M, Field JK, Genc B, Liloglou T, Lipscher E, Maier S;
 PI Nimmrich I;
 XX
 DR WPI; 2003-533029/50.
 XX
 PT Detecting and differentiating cytosine methylation state of genomic DNA,
 PT useful for diagnosing, treating prognosticating and/or monitoring lung
 PT cell proliferative disorders e.g. adenocarcinoma and squamous cell
 PT carcinoma.
 XX
 PS Claim 15; SEQ ID NO 901; 58pp; English.
 XX
 CC This invention relates to a novel method for detecting and
 CC differentiating between lung cell proliferative disorders associated with
 CC at least one gene and/or their regulatory regions. Specifically, it
 CC refers to a method comprising contacting a target nucleic acid in a
 CC biological sample with at least one reagent, wherein the reagent is able
 CC to distinguish between methylated and non-methylated CpG dinucleotides
 CC present in the target DNA. As such, it is possible to further
 CC differentiate and diagnose medical conditions including adenocarcinoma
 CC and squamous cell carcinoma, and their respective adjacent lung tissue.
 CC The present invention describes cytosine methylation state of genomic DNA
 CC that are useful as probes for determining the cytosine methylation state
 CC of single nucleotide polymorphisms (SNPs) of the target sequence. This
 CC oligonucleotide sequence is a primer oligomer used for the analysis of
 CC CpG positions within genomic DNA, used in an exemplification of the
 CC invention.
 SQ Sequence 17 BP; 1 A; 8 C; 1 G; 7 T; 0 U; 0 Other;

```
Query Match          15.6%; Score 11.4; DB 1; Length 17;
Best Local Similarity 92.3%; Pred. No. 7.3e+02;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

/      899 CCTGTGTCATTTT 911
      ||||| |||||
      5 CCTGTGTCATTTT 17

RESULT 238
JC70430
) ADC70430 standard; DNA; 17 BP.
{
{
{ ADC70430;
{
{ 18-DEC-2003 (first entry)
{
{ PCR primer 2 used to amplify RARB to identify CpG islands.
{
{ PCR; primer; ss; lung cell proliferative disorder; CpG dinucleotide;
{ adenocarcinoma; squamous cell carcinoma; cytostatic; probe; PNA-oligomer;
{ cytosine methylation state; RARB.
{ Unidentified.
{
{ WO2003052135-A2.
{
{ 26-JUN-2003.
{
{ 10-DEC-2002; 2002WO-EP014026.
{
{ 14-DEC-2001; 2001DE-01061625.
{ (EPIG-) EPIGENOMICS AG.
{
{ Burger M, Field JK, Genc B, Lilloglou T, Lipscher E, Maier S;
{ Nimmrich I;
{
{ WPI; 2003-533029/50.
{
{ Detecting and differentiating cytosine methylation state of genomic DNA,
{ useful for diagnosing, treating prognosticating and/or monitoring lung
{ cell proliferative disorders e.g. adenocarcinoma and squamous cell
{ carcinoma.
{
{ Example 3; Page 19; 58pp; English.
{
{ This invention relates to a novel method for detecting and
{ differentiating between lung cell proliferative disorders associated with
{ at least one gene and/or their regulatory regions. Specifically, it
{ refers to a method comprising contacting a target nucleic acid in a
{ biological sample with at least one reagent, wherein the reagent is able
{ to distinguish between methylated and non-methylated CpG dinucleotides
{ present in the target DNA. As such, it is possible to further
{ differentiate and diagnose medical conditions including adenocarcinoma
{ and squamous cell carcinoma, and their respective adjacent lung tissue.
{ The present invention describes cytostatic oligomers and PNA-oligomers
{ that are useful as probes for determining the cytosine methylation state
{ or single nucleotide polymorphisms (SNPs) of the target sequence. This
{ oligonucleotide sequence is the PCR primer 2 used to amplify the RARB
{ gene to identify the methylation status of a specific CpG site, used in
{ an exemplification of the invention.
{
{ Sequence 17 BP; 1 A; 8 C; 1 G; 7 T; 0 U; 0 Other;

Query Match          15.6%; Score 11.4; DB 1; Length 17;
Best Local Similarity 92.3%; Pred. No. 7.3e+02;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

      899 CCTGTGTCATTTT 911
      ||||| |||||
      5 CCTGTGTCATTTT 17
```

```
RESULT 239
ADC70409
ID ADC70409 standard; DNA; 17 BP.
XX
AC ADC70409;
XX
DT 18-DEC-2003 (first entry)
XX
DE
XX
XX Primer oligo used for analysing CpG islands in genomic DNA (SeqID 899).
XX
XX PCR; primer; ss; lung cell proliferative disorder; CpG dinucleotide;
KW adenocarcinoma; squamous cell carcinoma; cytostatic; probe; PNA-oligomer;
KW cytosine methylation state.
XX
OS Unidentified.
XX
XX WO2003052135-A2.
XX
XX 26-JUN-2003.
XX
XX 10-DEC-2002; 2002WO-EP014026.
XX
XX 14-DEC-2001; 2001DE-01061625.
XX (EPIG-) EPIGENOMICS AG.
XX
XX Burger M, Field JK, Genc B, Lilloglou T, Lipscher E, Maier S;
PI Nimmrich I;
XX
XX WPI; 2003-533029/50.
XX
XX Detecting and differentiating cytosine methylation state of genomic DNA,
PT useful for diagnosing, treating prognosticating and/or monitoring lung
PT cell proliferative disorders e.g. adenocarcinoma and squamous cell
PT carcinoma.
XX
XX Claim 15; SEQ ID NO 899; 58pp; English.
XX
XX This invention relates to a novel method for detecting and
CC differentiating between lung cell proliferative disorders associated with
CC at least one gene and/or their regulatory regions. Specifically, it
CC refers to a method comprising contacting a target nucleic acid in a
CC biological sample with at least one reagent, wherein the reagent is able
CC to distinguish between methylated and non-methylated CpG dinucleotides
CC present in the target DNA. As such, it is possible to further
CC differentiate and diagnose medical conditions including adenocarcinoma
CC and squamous cell carcinoma, and their respective adjacent lung tissue.
CC The present invention describes cytostatic oligomers and PNA-oligomers
CC that are useful as probes for determining the cytosine methylation state
CC or single nucleotide polymorphisms (SNPs) of the target sequence. This
CC oligonucleotide sequence is a primer oligomer used for the analysis of
CC CpG positions within genomic DNA, used in an exemplification of the
CC invention.
XX
XX Sequence 17 BP; 1 A; 8 C; 1 G; 7 T; 0 U; 0 Other;
SQ
Query Match          15.6%; Score 11.4; DB 1; Length 17;
Best Local Similarity 92.3%; Pred. No. 7.3e+02;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY      899 CCTGTGTCATTTT 911
      ||||| |||||
      5 CCTGTGTCATTTT 17
Db

RESULT 240
AAA40694
ID AAA40694 standard; DNA; 16 BP.
XX
AC AAA40694;
XX
XX 15-AUG-2000 (first entry)
DT
```


Gene coding for flavonoid-3',5'-hydroxylase of petunia petals - used to transform plants e.g. petunia, rose or tobacco to give blue flower colour and altered pigment pattern.

Claim 11; Page 62; 82pp; Japanese.

Insertion of the sequences (AAQ47840-42) into plants such as rose, petunia, tobacco and carnation, using a suitable vector such as agrobacterium, give transformed plants which express the gene, resulting in petals with a blue colour than normal, and/or pigmentation patterns which do not occur naturally. The sequences were amplified using primers (AAQ47843-70). Related single specific primers using a gene sequence coding for the haem-binding region of cytochrome P450 are shown in (AAQ47871-Q47903). (Updated on 25-MAR-2003 to correct PN field.)

Sequence 17 BP; 2 A; 5 C; 4 G; 5 T; 0 U; 1 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;
Best Local Similarity 76.5%; Pred. No. 7.9e+02;
Matches 13; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

900 CCTGGTCATTTCTTTG 916
|| || || || || || || ||
1 CCGGGGCATATTTCTTCG 17

RESULT 243
AAQ72496/c
AAQ72496 standard; DNA; 17 BP.

AAQ72496;

25-MAR-2003 (revised)
23-JUN-1995 (first entry)

Melanoma cell line LB-33-MEL cDNA PCR primer CHO910.

Tumour antigen rejection precursor; melanoma antigen-3; MAGE-3; cancer; cytolytic T cells; antigen B; human leucocyte antigen; cell line LB-33-MEL; PCR primer CHO10; ss.

Synthetic.

WO9423031-A1.

13-OCT-1994.

17-MAR-1994; 94WO-US002877.

26-MAR-1993; 93US-00037230.

(LUDW-) LUDWIG INST CANCER RES.

Gaugler B, Van Den Eynde B, Boon-Falleur T, Van Der Bruggen P; WPI; 1994-333192/41.

New tumour rejection antigen precursor MAGE3 - useful in treatment and diagnosis of cancer.

Example 32; Page 35; 105pp; English.

AAQ72495 and AAQ72496 are a pair of primers for the PCR amplification of the melanoma cell line LB-33-MEL cDNA, they also correspond to regions of the melanoma antigens 1, 2 and 3. Melanoma antigen-3 (MAGE-3), is a tumour rejection antigen precursor, melanomas characterised by the expression of MAGE-3 can be detected, or monitored, by contacting a test sample with an agent that can recognise MAGE-3. The melanoma can be treated by the administration of cytolytic T cells specific for the complex of antigen D (the mature rejection antigen derived from MAGE-3) and a human leucocyte antigen (esp. HLA-A1). (Updated on 25-MAR-2003 to correct PN field.)

XX Sequence 17 BP; 6 A; 2 C; 9 G; 0 T; 0 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;
Best Local Similarity 81.2%; Pred. No. 7.9e+02;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

927 TTTATCCCTCCTCTTC 942
|| || || || || || || ||
16 TTGGCCCCCTCTCTTC 1

RESULT 244
AAT05088/c
AAT05088 standard; DNA; 17 BP.

AAT05088;

25-MAR-2003 (revised)
18-MAR-1996 (first entry)

MAGE PCR primer CHO10.

MAGE-6; melanoma; tumour rejection antigen; cancer; diagnosis; polymerase chain reaction; PCR; primer; ss.

Synthetic.

WO9523874-A1.

08-SEP-1995.

23-FEB-1995; 95WO-US002203.

01-MAR-1994; 94US-00204727.
10-MAR-1994; 94US-00209172.
01-SEP-1994; 94US-00299849.
30-NOV-1994; 94US-00346774.

(LUDW-) LUDWIG INST CANCER RES.

De Plaen E, Boon-Falleur T, Lethe B, Szikora J, De Smet C; Chomez P, Gaugler B, Van Den Eynde B, Brasseur F, Patard J; Weynants P, Marchand M, Van Der Bruggen P; WPI; 1995-320596/41.

Determn. of cancerous condition(s) - using a nucleic acid as a primer to determine expression of a MAGE tumour rejection antigen precursor.

Example 32; Page 35; 121pp; English.

Primers CHO9 and CHO10 (AAT05087-88) correspond to regions of exon 3 of tumor rejection antigen precursor MAGE-1, MAGE-2 and MAGE-3 genes. They were used to amplify human melanoma cell line LB-33-MEL cDNA. A PCR product was obtained that differed from previously identified MAGE 1, 2, 3, 4, and 5 genes, and was named MAGE 6 (AAT01166). (Updated on 25-MAR-2003 to correct PI field.)

Sequence 17 BP; 6 A; 2 C; 9 G; 0 T; 0 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;
Best Local Similarity 81.2%; Pred. No. 7.9e+02;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

927 TTTATCCCTCCTCTTC 942
|| || || || || || || ||
16 TTGGCCCCCTCTCTTC 1

RESULT 245
AAT81160/c
AAT81160 standard; RNA; 17 BP.

```

XX AAT81160;
AC
XX 29-SEP-1997 (first entry)
DT
XX
XX Human c-myb hammerhead ribozyme target sequence (nt. position 991).
DE
XX Enzymatic nucleic acid; hammerhead; ribozyme; cleavage; human;
KW smooth muscle cell; hyperproliferation; restenosis; cancer; c-myb;
KW coronary angioplasty; ss.
XX
XX Homo sapiens.
OS
XX
XX WO9531541-A2.
XX
XX 23-NOV-1995.
XX
XX 18-MAY-1995; 95WO-US006368.
XX
XX 18-MAY-1994; 94US-00245466.
XX 13-JAN-1995; 95US-00373124.
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Stinchcomb DT, Draper K, Mcswiggen J, Jarvis T;
XX WPI; 1996-010927/01.
XX
XX New enzymatic nucleic acid molecules - cleave RNA produced by e.g. c-myb,
XX for treating restenosis or cancer.
XX
XX Claim 1; Page 67; 128pp; English.
XX
XX The present sequence represents the preferred target sequence for an
XX enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves
XX the human c-myb sequence at the base position indicated in the descriptor
XX line. The c-myb sequence was screened for optimal ribozyme target sites
XX using a computer folding algorithm, and regions of the mRNA which did not
XX form secondary folding structures and contained potential ribozyme
XX cleavage sites were identified. Ribozymes were synthesised and their
XX activities optimised by either varying the length of the binding arms or
XX by modification to prevent degradation by nucleases. The ribozymes cleave
XX the c-myb sequence and can be used to prevent smooth muscle cell
XX hyperproliferation in restenosis, especially after coronary angioplasty,
XX and in cancers
XX
XX Sequence 17 BP; 5 A; 2 C; 4 G; 0 T; 6 U; 0 Other;
SQ
XX
XX Query Match 15.3%; Score 11.2; DB 1; Length 17;
XX Best Local Similarity 81.2%; Pred. No. 7.9e+02;
XX Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX Qy 948 TTTAATGTATCGCTAC 963
XX ||||| |||||
XX Db 17 TTACATGTATCGCTAC 2
XX
XX RESULT 246
XX PAT81161/c
XX Td AAT81161 standard; RNA; 17 BP.
XX
XX AC AAT81161;
XX
XX 29-SEP-1997 (first entry)
XX
XX Human c-myb hammerhead ribozyme target sequence (nt. position 992).
XX
XX Enzymatic nucleic acid; hammerhead; ribozyme; cleavage; human;
XX smooth muscle cell; hyperproliferation; restenosis; cancer; c-myb;
XX coronary angioplasty; ss.
XX
XX Homo sapiens.
XX

```

```

PN WO9531541-A2.
XX
XX 23-NOV-1995.
XX
XX 18-MAY-1995; 95WO-US006368.
XX
XX 18-MAY-1994; 94US-00245466.
XX 13-JAN-1995; 95US-00373124.
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Stinchcomb DT, Draper K, Mcswiggen J, Jarvis T;
XX WPI; 1996-010927/01.
XX
XX New enzymatic nucleic acid molecules - cleave RNA produced by e.g. c-myb,
XX for treating restenosis or cancer.
XX
XX Claim 1; Page 67; 128pp; English.
XX
XX The present sequence represents the preferred target sequence for an
XX enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves
XX the human c-myb sequence at the base position indicated in the descriptor
XX line. The c-myb sequence was screened for optimal ribozyme target sites
XX using a computer folding algorithm, and regions of the mRNA which did not
XX form secondary folding structures and contained potential ribozyme
XX cleavage sites were identified. Ribozymes were synthesised and their
XX activities optimised by either varying the length of the binding arms or
XX by modification to prevent degradation by nucleases. The ribozymes cleave
XX the c-myb sequence and can be used to prevent smooth muscle cell
XX hyperproliferation in restenosis, especially after coronary angioplasty,
XX and in cancers
XX
XX Sequence 17 BP; 6 A; 2 C; 4 G; 0 T; 5 U; 0 Other;
SQ
XX
XX Query Match 15.3%; Score 11.2; DB 1; Length 17;
XX Best Local Similarity 81.2%; Pred. No. 7.9e+02;
XX Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX Qy 948 TTTAATGTATCGCTAC 963
XX ||||| |||||
XX Db 16 TTACATGTATCGCTAC 1
XX
XX RESULT 247
XX AAT81530
XX ID AAT81530 standard; RNA; 17 BP.
XX
XX AC AAT81530;
XX
XX 14-DEC-1997 (first entry)
XX
XX Human c-myb hammerhead ribozyme target sequence (nt. position 2779).
XX
XX Enzymatic nucleic acid; hammerhead; ribozyme; cleavage; human;
XX smooth muscle cell; hyperproliferation; restenosis; cancer; c-myb;
XX coronary angioplasty; ss.
XX
XX Homo sapiens.
XX
XX WO9531541-A2.
XX
XX 23-NOV-1995.
XX
XX 18-MAY-1995; 95WO-US006368.
XX
XX 18-MAY-1994; 94US-00245466.
XX 13-JAN-1995; 95US-00373124.
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Stinchcomb DT, Draper K, Mcswiggen J, Jarvis T;
XX

```

WPI; 1996-010927/01.
 New enzymatic nucleic acid molecules - cleave RNA produced by e.g. c-myc, for treating restenosis or cancer.
 Claim 1; Page 77; 128pp; English.
 The present sequence represents the preferred target sequence for an enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves the human c-myc sequence at the base position indicated in the descriptor line. The c-myc sequence was screened for optimal ribozyme target sites using a computer folding algorithm, and regions of the mRNA which did not form secondary folding structures and contained potential ribozyme cleavage sites were identified. Ribozymes were synthesised and their activities optimised by either varying the length of the binding arms or by modification to prevent degradation by nucleases. The ribozymes cleave the c-myc sequence and can be used to prevent smooth muscle cell hyperproliferation in restenosis, especially after coronary angioplasty, and in cancers

Sequence 17 BP; 3 A; 3 C; 4 G; 0 T; 7 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;

Best Local Similarity 37.5%; Pred. No. 7.9e+02;

Matches 6; Conservative 7; Mismatches 3; Indels 0; Gaps 0;

913 TTGGTCTTGGCTTT 928

1 UAUGGUUAGGUGU 16

RESULT 248

AX6824/C

AAx68824 standard; RNA; 17 BP.

AAx68824;

28-JUL-1999 (first entry)

Human flt1 VEGF receptor hammerhead ribozyme substrate #119.

Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1; KDR; hammerhead ribozyme; hairpin ribozyme; cleavage; tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease; fms-like tyrosine kinase 1; kinase insert domain containing receptor; foetal liver kinase 1; ss.

Homo sapiens.

WO9715662-A2.

01-MAY-1997.

25-OCT-1996; 96WO-US017480.

26-OCT-1995; 95US-0005974P.

11-JAN-1996; 96US-00584040.

(RIBO-) RIBOZYME PHARM INC.

(CHIR) CHIRON CORP.

Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;

WPI; 1997-259017/23.

Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA stability - useful for treating e.g. tumour angiogenesis, psoriasis, rheumatoid arthritis, etc., in a human patient.

Claim 4; Page 50; 218pp; English.

The present invention describes nucleic acid molecules which modulate the synthesis, expression and/or stability of a mRNA encoding 1 or more

receptors of vascular endothelial growth factor (VEGF). A patient (preferably human) having a condition associated with the level of the fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be treated by administering the nucleic acid molecule or the expression vector to the patient. AAX67275 to AAX75752 represent specific examples of nucleic acid molecules from the present invention

Sequence 17 BP; 9 A; 3 C; 3 G; 0 T; 2 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;

Best Local Similarity 81.2%; Pred. No. 7.9e+02;

Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 909 TTTCCTTGGCTCTTGC 924

|||||

17 TTCTTTGTACGTTGC 2

RESULT 249

AAx70124

ID AAX70124 standard; RNA; 17 BP.

XX AC

AAx70124;

XX DT

28-JUL-1999 (first entry)

XX DE

Human flt1 VEGF receptor hammerhead ribozyme substrate #1419.

XX KW

Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;

XX KW

KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;

XX KW

tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;

XX KW

fms-like tyrosine kinase 1; kinase insert domain containing receptor;

XX OS

Homo sapiens.

XX EN

WO9715662-A2.

XX XX

01-MAY-1997.

XX XX

25-OCT-1996; 96WO-US017480.

XX XX

26-OCT-1995; 95US-0005974P.

XX PR

11-JAN-1996; 96US-00584040.

XX XX

(RIBO-) RIBOZYME PHARM INC.

XX PA

(CHIR) CHIRON CORP.

XX XX

Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;

XX DR

WPI; 1997-259017/23.

XX XX

Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA stability - useful for treating e.g. tumour angiogenesis, psoriasis, rheumatoid arthritis, etc., in a human patient.

XX PS

Claim 4; Page 89; 218pp; English.

XX CC

The present invention describes nucleic acid molecules which modulate the

XX CC

synthesis, expression and/or stability of a mRNA encoding 1 or more

XX CC

receptors of vascular endothelial growth factor (VEGF). A patient

XX CC

(preferably human) having a condition associated with the level of the

XX CC

fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing

XX CC

receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour

XX CC

angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be

XX CC

treated by administering the nucleic acid molecule or the expression

XX CC

vector to the patient. AAX67275 to AAX75752 represent specific examples

XX CC

of nucleic acid molecules from the present invention

XX SQ

Sequence 17 BP; 2 A; 4 C; 1 G; 0 T; 10 U; 0 Other;

Query Match	15.3%	Score 11.2;	DB 1;	Length 17;
Best Local Similarity	25.0%;	Pred. No. 7.9e+02;		
Matches	4; Conservative	9; Mismatches	3	Indels

Q4 907 ATTTCTTTGGTCTTT 922
| : : : | : : :
D3 2 AUAATCUCUGCUCUUM 17

RESULT 250
AAV95714
ID AAV95714 standard: RNA: 17 BP.

AAV95714:

01-MAR-1999 (first entry)

XX Solanidine glucosyltransferase target sequence position 326

AA
KW Solanidine; glucosyltransferase; potato; citrate synthase; target;
KW hammerhead ribozyme; hairpin ribozyme; alkaloid biosynthesis;
KW flower formation; cleavage; solanaceous plant; ss.

AA
CS
solanium tuberosum

AA
PV
WO9832843-A2-XX
30-III.-1998
97

14--JAN-1998. 98WO-IIS000738

XX
CD 28 JAN 1967 0710 0036545D

28-JAN-1997; 97US-0036599P.

[illegible][illegible]

XX
WT. 1000 103030/30

Figure 1

PT biosynthesis or regulating flowering.

PS Claim 13; Page 46; 79pp; English.

The present invention describes a

expression of plant genes: (i) involved in biosynthesis of alkaloids; or
(ii) involved in flower formation. AAV95982 to AAV96334, and AAV96335 to AAV96354 represent potato solanidine glucosyltransferase hammerhead and hairpin ribozymes, respectively. AAV95981, and AAV96355 to AAV96734 represent potato solanidine glucosyltransferase target sequences. AAV96773 to AAV97170, and AAV97171 to AAV97195 represent potato citrate synthase hammerhead and hairpin ribozymes, respectively. AAV96735 to AAV96772, and AAV97196 to AAV97220 represent potato citrate synthase target sequences. Ribozymes of the present invention can be used to inhibit the synthesis of toxic alkaloids in solanaceous plants, particularly potato but also tomato, pepper, aubergine and ditura or to inhibit flowering in potato, lettuce, spinach, cabbage, brussel sprouts, arugula, kale, collards, chard, beet, turnip, sweet potato and turf grass. Also the ribozymes can be used for RNA manipulation in the same way that restriction endonucleases are for DNA, as well as to examine genetic drift and mutations in plants and to detect specific RNA. The ribozymes can be targeted to specific genes or to consensus sequences within a family of related genes, and being catalytic need to be present at only very low concentrations

Sequence 17 BP; 3 A; 2 C; 1 G; 0 T; 11 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;
Best Local Similarity 18.8%; Pred. No. 7.9e+02;
Matches 3; Conservative 10; Mismatches 3; Indels 0; Gaps 0;

Qy 907 ATTTTCTTTGGTCTTT 922
|::: :| :|:::
db 2 AUUUUUUAUGCUCUUU 17

RESULT 251

AAA18559
ID AAA18559 standard: RNA: 17 BP.

AC AAA18559;

19-JUN-2000 (first entry)

DE Human TIE-2 substrate sequence SEO ID NO:1785.

Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; KW
integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; KW
hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; KW
ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD; KW
dermatologic; RNA cleavage; cancer; diabetic retinopathy; arthritis; KW
eye related macular degeneration; inflammation; neovascular glaucoma; KW
myopic degeneration; psoriasis; verruca vulgaris; angiofibroma; KW
tuberculous scleritis; pot-wine stain; Sturge Weber syndrome; KW
Klippel-Trenaunay-Weber syndrome; Osler-Weber Rendu syndrome; ss.

OS Homo sapiens.

PN WO9950403-A2.

07-OCT-1999

24-MAR-1999: 99WQ-IIS006507

27-MAR-1998 98UIS-0079678P

PA (RIBO-) RIBOZYME PHARM INC.

XX	Pavco PA.	Roberts E.	Jarvis T.	Coeshott C.	Mcswiggen JA:
----	-----------	------------	-----------	-------------	---------------

DR WPI: 1999-591315/50.

PT Novel ribozymes for modulating the synthesis, expression and/or stability of an mRNA encoding an angiogenic factors.

PS Claim 56; Page 102; 305pp; English.

The present invention describes enzymatic cleavage RNA encoded by an aryl hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3 gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAAA16775 to CAA117167 and AAAA17561 to AAAA17622 represent ribozyme sequences for ARNT, and AAAA17168 to AAAA17560 and AAAA17623 to AAAA17684 represent their corresponding target sequences; AAAA17685 to AAAA18385 and AAAA19087 to AAAA19154 represent ribozyme sequences for Tie-2, and AAAA18386 to AAAA19086 and AAAA19155 to AAAA19222 represent their corresponding target sequences; AAAA19223 to AAAA20361 and AAAA21501 to AAAA21595 represent ribozyme sequences for integrin alpha 6 subunit, and AAAA20362 to AAAA21500 and AAAA21596 to AAAA21688 represent their corresponding target sequences; AAAA21689 to AAAA22475 and AAAA23263 to AAAA23342 represent ribozyme sequences for integrin subunit beta 3, and AAAA22476 to AAAA23262, AAAA23343 to AAAA23422 represent their corresponding target sequences. The ribozymes of the invention are used for modulating the synthesis, expression and/or stability of an mRNA encoding angiogenic factor, especially ARNT, integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are especially used to treat cancer, diabetic retinopathy, age related macular degeneration (ARMD), inflammation, and arthritis, as well as neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris, angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome, and other syndromes and diseases related to the levels of ARNT, Tie-2, integrin subunit alpha-6, or integrin subunit beta-3.

```
Sequence 17 BP; 4 A; 4 C; 5 G; 0 T; 4 U; 0 Other;
Query Match 15.3%; Score 11.2; DB 1; Length 17;
Best Local Similarity 62.5%; Pred. No. 7.9e+02;
Matches 10; Conservative 3; Mismatches 3; Indels 0; Gaps 0;

956 ATCGTACCAACGGTG 971
|||||
2 AUGGCUUCCAGGAUG 17

RESULT 252
AA20759
AAA20759 standard; RNA; 17 BP.
AA20759;
19-JUN-2000 (first entry)
Integrin alpha 6 subunit substrate sequence SEQ ID NO:3985.
Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;
ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
age related macular degeneration; inflammation; neovascular glaucoma;
myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
tuberos sclerosis; pot-wine stain; Sturge Weber syndrome;
Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
Homo sapiens.
WO9950403-A2.
07-OCT-1999.
24-MAR-1999; 99WO-US006507.
27-MAR-1998; 98US-0079678P.
(RIBO-) RIBOZYME PHARM INC.
Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;
WPI; 1999-591315/50.
Novel ribozymes for modulating the synthesis, expression and/or stability
of an mRNA encoding an angiogenic factors.
Claim 55; Page 165; 305pp; English.
The present invention describes enzymatic nucleic acid molecules with RNA
cleaving activity, which specifically cleave RNA encoded by an aryl
hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
and AAA19155 to AAA19222 represent their corresponding target sequences;
AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
AAA21596 to AAA21688 represent their corresponding target sequences;
AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence
for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
AAA23422 represent their corresponding target sequences. The ribozymes of
the invention are used for modulating the synthesis, expression and/or
stability of an mRNA encoding angiogenic factor, especially ARNT,
integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
especially used to treat cancer, diabetic retinopathy, age related
macular degeneration (ARMD), inflammation, and arthritis, as well as
neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
```

```
CC angiofibroma of tuberos sclerosis, pot-wine stains, Sturge Weber
CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
CC and other syndromes and diseases related to the levels of ARNT, Tie-2,
CC integrin subunit alpha-6, or integrin subunit beta-3
XX Sequence 17 BP; 2 A; 1 C; 2 G; 0 T; 12 U; 0 Other;
Query Match 15.3%; Score 11.2; DB 1; Length 17;
Best Local Similarity 18.8%; Pred. No. 7.9e+02;
Matches 3; Conservative 10; Mismatches 3; Indels 0; Gaps 0;

906 CATTTCCTTTGGTCTT 921
|||||
1 CUUUUUUUUGGUUUU 16

RESULT 253
AAV93546
AAV93546 standard; RNA; 17 BP.
AAV93546;
18-FEB-1999 (first entry)
Human B-raf substrate nucleotide position 1606.
Human; c-raf; A-raf; B-raf; hammerhead ribozyme; hairpin ribozyme;
target; substrate; catalyst; modulation; expression; Raf gene; delivery;
screening; identification; synthesis; deprotection; purification; cancer;
inflammation; psoriasis; non-hepatic ascites; infection; genetic drift;
restenosis; rheumatoid arthritis; ss.
Homo sapiens.
WO9850530-A2.
12-NOV-1998.
05-MAY-1998; 98WO-US009249.
09-MAY-1997; 97US-0046059P.
09-JUN-1997; 97US-0049002P.
03-JUL-1997; 97US-0051718P.
22-AUG-1997; 97US-0056808P.
02-OCT-1997; 97US-0061321P.
02-OCT-1997; 97US-0061324P.
05-NOV-1997; 97US-0064866P.
19-DEC-1997; 97US-0068212P.
(RIBO-) RIBOZYME PHARM INC.
Jarvis T, Matulic-Adamic J, Reynolds M, Kisich K, Bellon L;
Parry T, Beigelman L, Mcswiggen JA, Karpeisky A, Burgin A;
Thompson J, Workman CT, Beaudry A, Sweedler D;
WPI; 1999-009494/01.
Identifying new catalytic nucleic acid that modulates selected processes
- especially ribozymes that cleave Raf RNA for treating cancer,
restenosis, and also new ribozymes and modified nucleoside triphosphates
used as antiviral agents and synthons.
Claim 177; Page 169; 259pp; English.
A method has been developed for the identification of a nucleic acid
capable of modulating a process in a biological system. The method
comprises: (a) introducing into the system a random library of nucleic
acid catalysts (NAC) having a substrate binding domain (SBD), comprising
a random sequence, and a catalytic domain (CD); and (b) identifying NAC
in systems where modulation has occurred and/or determining the sequence
of at least part of the SBDs in such systems. Nucleic acid molecules with
endonuclease activity and catalytic activity, from the present invention,
are used to modulate gene expression in plant and mammalian cells and to
```


CC cleave target nucleic acid, particularly for treating systemic diseases
 CC caused by specific RNA, e.g. cancer, inflammation, psoriasis, non-hepatic
 CC ascites and infection. They may also be used to detect genetic drift and
 CC mutations in diseased cells and to determine c-raf RNA. Specifically NACs
 CC with RNA-cleaving activity that modulate expression of the Raf gene, are
 CC used to treat cancer, restenosis, psoriasis or rheumatoid arthritis, or
 CC generally any condition associated with the level of c-raf. Introduction
 CC of sugar/phosphate modifications increases stability against nuclease and
 CC activity. AAV90922 to AAV93877 represent NACs that can be used in the
 CC method, specifically for modulating the expression of a Raf gene
 XX
 SQ Sequence 17 BP; 3 A; 5 C; 3 G; 0 T; 6 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;
 Best Local Similarity 43.8%; Pred. No. 7.9e+02;
 Matches 7; Conservative 6; Mismatches 3; Indels 0; Gaps 0;

Qy 934 CTCCTCTTCATTGGTT 949

Db 1 CUCACUCUACUGGCGU 16

RESULT 254
 AAX84106/c
 ID AAX84106 standard; DNA; 17 BP.

AC AAX84106;

XX 08-SEP-1999 (first entry)

XX PCR primer for MAGE gene exon 3.

XX Tumour rejection antigen; vaccine; cancer; MAGE; PCR primer; ss.

XX Synthetic.

OS Homo sapiens.

XX US5925729-A.

XX 20-JUL-1999.

XX 02-MAY-1994; 94US-00142368.

XX 23-MAY-1991; 91US-00705702.

PR 09-JUL-1991; 91US-00728838.

PR 23-SEP-1991; 91US-00764365.

PR 12-DEC-1991; 91US-00807043.

XX (LUDW-) LUDWIG INST CANCER RES.

XX Van Der Bruggen P, Traversari C, Lurquin C, Boon T, De Plaen E;

PI Van Pel A, Chomez P, Van Den Eynde B;

PI WPI; 1999-418294/35.

XX New tumour rejection antigen is useful as a vaccine against cancerous
 XX diseases.

XX Example 32; Col 21; 58pp; English.

XX This sequence represents a PCR primer for the MAGE gene exon3. The
 CC invention relates to a tumour rejection antigen sequence that is useful
 CC as a tumour rejection antigen for vaccination against cancerous
 CC conditions

XX Sequence 17 BP; 6 A; 2 C; 9 G; 0 T; 0 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;
 Best Local Similarity 81.2%; Pred. No. 7.9e+02;
 Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 927 TTTATCCCTCCTCTTC 942

||| |||||

Db 16 TTGGCCCTCCTCTTC 1

RESULT 255

AAA36536

ID AAA36536 standard; DNA; 17 BP.

XX AAA36536;

AC AAA36536;

XX 26-JUL-2000 (first entry)

XX Human genomic SNP allele specific oligonucleotide SEQ ID NO:601.

XX Human; single nucleotide polymorphism; SNP; genotyping; DNA analysis;

XX allele specific oligonucleotide; ASO; reduced complexity genome; RCG;

XX genomic classification; identification; DNA fingerprinting;

XX tumour characterisation; hybridisation; ss.

XX Homo sapiens.

XX WO200018960-A2.

XX 06-APR-2000.

XX 24-SEP-1999; 99WO-US022283.

XX 25-SEP-1998; 98US-0101757P.

XX (MASI) MASSACHUSETTS INST TECHNOLOGY.

XX Landers JE, Jordan B, Housman DE, Charest A;

XX WPI; 2000-293181/25.

XX Detection of single nucleotide polymorphisms in genomes by preparation
 PT and analysis of reduced complexity genomes, useful for genotyping,
 PT fingerprinting and determining allele frequency of SNPs.
 XX Disclosure; Page 71; 111pp; English.

XX A method has been developed for detecting the presence or absence of a
 CC single nucleotide polymorphism (SNP) allele in a genomic sample. The
 CC method comprises preparing a reduced complexity genome (RCG) from the
 CC genomic sample and analysing the RCG for the presence or absence of a SNP
 CC allele. The method can be used to characterise a tumour, to generate a
 CC genomic pattern for an individual genome or to generate a genomic
 CC classification code for a genome. The method can be used to assess
 CC whether a subject is at risk for developing a disease or to identify a
 CC set of SNP alleles associated with a disease. The method can also be used
 CC to perform linkage analysis. AAA35944 to AAA35947 represent sequences
 CC used in the exemplification of the present invention. AAA35948 to
 CC AAA36632 represent nucleotide sequences containing SNPs

XX Sequence 17 BP; 2 A; 6 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;
 Best Local Similarity 81.2%; Pred. No. 7.9e+02;
 Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 922 TGCCTTTTATCCCTCC 937

Db 2 TGCCTTTTATCTGCC 17

RESULT 256

AAF04245

ID AAF04245 standard; DNA; 17 BP.

XX AAF04245;

XX 16-FEB-2001 (first entry)

XX Hammerhead ribozyme substrate #1761.

Ribozyme; erythropoietin; granulocyte colony stimulating factor;
interferon alpha; ss.

Homo sapiens.

WO200061729-A2.

19-OCT-2000.

11-APR-2000; 2000WO-US009721.

12-APR-1999; 99US-0129390P.

(RIBO-) RIBOZYME PHARM INC.

Blatt L, Zwick M, Pavco P, Mcswiggen J;

WPI; 2000-647423/62.

Enzymatic and antisense nucleic acid inhibition of repressor genes,
useful for producing e.g. granulocyte colony stimulating factor protein,
interferon alpha and erythropoietin.

Claim 4; Page 96; 164pp; English.

The present invention relates to enzymatic and antisense nucleic acid
molecules that act as inhibitors of the expression of repressor genes
encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription
factor gene, IRF-2 and/or the CAAAT Displacement Protein (CDP).
Inhibition of the repressors removes prevents inhibition (and
consequently increases expression of) genes involved in the production of
erythropoietin, granulocyte colony stimulating factor protein and
interferon alpha

Sequence 17 BP; 2 A; 2 C; 3 G; 10 T; 0 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;

Best Local Similarity 81.2%; Pred. No. 7.9e+02;

Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

911 TCTTTGGTCTTTGGCT 926

|||||
1 TTTTGTATCTTTGGCT 16

SULT 257

F04693

AAF04693 standard; DNA; 17 BP.

AAF04693;

16-FEB-2001 (first entry)

Hammerhead ribozyme substrate #2209.

Ribozyme; erythropoietin; granulocyte colony stimulating factor;
interferon alpha; ss.

Homo sapiens.

WO200061729-A2.

19-OCT-2000.

11-APR-2000; 2000WO-US009721.

12-APR-1999; 99US-0129390P.

(RIBO-) RIBOZYME PHARM INC.

Blatt L, Zwick M, Pavco P, Mcswiggen J;

DR WPI; 2000-647423/62.

XX Enzymatic and antisense nucleic acid inhibition of repressor genes,
PT useful for producing e.g. granulocyte colony stimulating factor protein,
PT interferon alpha and erythropoietin.

XX

PS Claim 4; Page 106; 164pp; English.

XX

CC The present invention relates to enzymatic and antisense nucleic acid
CC molecules that act as inhibitors of the expression of repressor genes
CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription
CC factor gene, IRF-2 and/or the CAAAT Displacement Protein (CDP).
CC Inhibition of the repressors removes prevents inhibition (and
CC consequently increases expression of) genes involved in the production of
CC erythropoietin, granulocyte colony stimulating factor protein and
CC interferon alpha

XX

SQ Sequence 17 BP; 2 A; 2 C; 3 G; 10 T; 0 U; 0 Other;

XX

Query Match

Best Local Similarity 15.3%; Score 11.2; DB 1; Length 17;

Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

XX

OY 911 TCTTTGGTCTTTGGCT 926

|||||

1 TTTTGTATCTTTGGCT 16

DB

RESULT 258

AAH95137

ID AAH95137 standard; RNA; 17 BP.

XX

AC AAH95137;

XX

DT 09-OCT-2001 (first entry)

XX

DE Human Chk1 ribozyme substrate SEQ ID NO: 562.

XX

KW Human; checkpoint kinase-1; Chk1; antisense; ribozyme; gene therapy;
KW RNA cleavage; cancer; ss.
XX Homo sapiens.
XX WO200157206-A2.
XX 09-AUG-2001.
XX 02-FEB-2001; 2001WO-US003504.
XX 03-FEB-2000; 2000US-0179983P.
XX (RIBO-) RIBOZYME PHARM INC.
XX (FATT/) FATTAEY A R.
XX Fattaey AR, Jarvis T, Mcswiggen J, Booher RN, Holman PS;
XX WPI; 2001-496922/54.
XX Novel nucleic acid molecule e.g., ribozymes or antisense nucleic acid
XX molecules, which downregulates expression of a checkpoint kinase-1 gene,
XX useful for treating colorectal, lung, breast or prostate cancers.
XX Claim 4; Page 64; 115pp; English.
XX The present invention provides nucleic acid molecules capable of
XX downregulating the expression of the human checkpoint kinase-1 (Chk1)
XX gene. These may be antisense or ribozyme sequences, and are useful in the
XX treatment of diseases associated with conditions affected by Chk1 levels,
XX including cancer. The present sequence is an oligonucleotide described in
XX the exemplification of the invention
XX Sequence 17 BP; 3 A; 4 C; 2 G; 0 T; 8 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;
 Best Local Similarity 37.5%; Pred. No. 7.9e+02;
 Matches 6; Conservative 7; Mismatches 3; Indels 0; Gaps 0;

QV 900 CTGGTCAATTTCTTT 915
 ||| :|| : :| :| :
 Db 2 CCUGAUCAUAGCUUU 17

RESULT 259
 AAH95658
 ID AAH95658 standard; RNA; 17 BP.
 XX
 AC AAH95658;
 XX
 DT 09-OCT-2001 (first entry)
 XX
 DE Human Chk1 ribozyme substrate SEQ ID NO: 1083.
 XX
 KW Human; checkpoint kinase-1; Chk1; antisense; ribozyme; gene therapy;
 KW RNA cleavage; cancer; ss.
 XX
 OS Homo sapiens.
 OS
 PN WO200157206-A2.
 XX
 PD 09-AUG-2001.
 XX
 PF 02-FEB-2001; 2001WO-US003504.
 XX
 PR 03-FEB-2000; 2000US-0179983P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 PA (FATT/) FATTAEY A R.
 XX
 PI Fattaey AR, Jarvis T, Mcswiggen J, Booher RN, Holman PS;
 XX WPI; 2001-496922/54.
 DR
 XX Novel nucleic acid molecule e.g., ribozymes or antisense nucleic acid
 PT molecules, which downregulate expression of a checkpoint kinase-1 gene,
 PT useful for treating colorectal, lung, breast or prostate cancers.
 XX
 PS Claim 4; Page 80; 115pp; English.
 XX
 CC The present invention provides nucleic acid molecules capable of
 CC downregulating the expression of the human checkpoint kinase-1 (Chk1)
 CC gene. These may be antisense or ribozyme sequences, and are useful in the
 CC treatment of diseases associated with conditions affected by Chk1 levels,
 CC including cancer. The present sequence is an oligonucleotide described in
 CC the exemplification of the invention
 XX
 SQ Sequence 17 BP; 3 A; 4 C; 2 G; 0 T; 8 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;
 Best Local Similarity 37.5%; Pred. No. 7.9e+02;
 Matches 6; Conservative 7; Mismatches 3; Indels 0; Gaps 0;

QY 900 CCTGGTCAATTTCTTT 915
 ||| :|| : :| :| :
 Db 2 CCUGAUCAUAGCUUU 17

RESULT 260
 ABK02974
 ID ABK02974 standard; RNA; 17 BP.
 XX
 AC ABK02974;
 XX
 DT 12-MAR-2002 (first entry)
 XX
 DE Human CD20 Hammerhead ribozyme #273.
 XX

Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
 cerebroprotective; nootropic; neuroprotective; antiparkinsonian;
 muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
 DNazyme; inozyme; G-cleaver; amberyne; zinzyme; lymphoma; leukaemia;
 B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
 human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
 MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
 inflammatory arthropathy; central nervous system injury;
 cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
 chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
 Parkinson's disease; ataxia; Huntington's disease;
 Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
 Homo sapiens.
 Synthetic.
 WO200159103-A2.
 16-AUG-2001.
 09-FEB-2001; 2001WO-US004273.
 11-FEB-2000; 2000US-0181797P.
 28-FEB-2000; 2000US-0185516P.
 06-MAR-2000; 2000US-0187128P.
 (RIBO-) RIBOZYME PHARM INC.
 (BLAT/) BLATT L.
 (MCSW/) MCSWIGGEN J.
 (CHOW/) CHOWRIRA B M.
 Blatt L, Mcswiggen J, Chowrira BM;
 WPI; 2001-607195/69.
 Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
 constructs, which down regulate expression of a CD20 gene or neurite
 growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
 central nervous system injury.
 Claim 30; Page 144; 200pp; English.
 The invention relates to a nucleic acid molecule which down regulates
 expression of a CD20 gene and a nucleic acid molecule which down
 regulates expression of a neurite growth inhibitor gene (NOGO). The
 nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
 DNazyme) an Inozyme (an endolytic nucleic acid cleaving an RNA molecule
 possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr
 an amberyne (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA
 with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA
 of CD20 in the presence of a divalent cation that is preferably Mg²⁺.
 Furthermore, it may be contacted with a cell to reduce CD20 activity of
 the cell and treat a patient having a condition associated with the level
 of CD20. The treatment may further comprise the use of one or more
 therapies. In particular, the CD20 targeting nucleic acid may be used to
 treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular NHL, lymphocytic
 Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
 leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
 lymphoma (MCL), immunocytoma (IMC), and inflammatory arthropathy. The NOGO-
 immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-
 targeting nucleic acid is used to cleave RNA of the NOGO gene in the
 presence of a divalent cation that is preferably Mg²⁺. Furthermore, the
 nucleic acid may be contacted with a cell to reduce NOGO activity of the
 cell and treat a patient having a condition associated with the level of
 NOGO. The treatment may further comprise the use of one or more
 therapies. In particular, the NOGO-targeting nucleic acid may be used to
 treat central nervous system (CNS) injury and cerebrovascular accident
 (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
 chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
 Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
 disease, muscular dystrophy, and/or other neurodegenerative disease
 states which respond to the modulation of NOGO expression. The present
 sequence is a hammerhead ribozyme of the invention

29-MAY-2002 (first entry)
Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:7084.
Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
skeletal muscle disorder; amplicon; screening; ss.
Homo sapiens.
WO200192524-A2.
06-DEC-2001.
25-MAY-2001; 2001WO-US016981.
26-MAY-2000; 2000US-0207456P.
21-SEP-2000; 2000US-0234687P.
27-SEP-2000; 2000US-0236359P.
04-OCT-2000; 2000GB-00024263.
30-JAN-2001; 2001WO-US000661.
30-JAN-2001; 2001WO-US000662.
30-JAN-2001; 2001WO-US000663.
30-JAN-2001; 2001WO-US000664.
30-JAN-2001; 2001WO-US000665.
30-JAN-2001; 2001WO-US000666.
30-JAN-2001; 2001WO-US000667.
30-JAN-2001; 2001WO-US000668.
30-JAN-2001; 2001WO-US000669.
30-JAN-2001; 2001WO-US000670.
05-FEB-2001; 2001US-0266860P.
(AEOM-) AEOMICA INC.
Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
WPI; 2002-179446/23.
New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
or as specific biomolecule capture probes for surface-enhanced laser
desorption ionization, comprises human myosin-like protein hGDMLP-1.
Disclosure; SEQ ID NO 7084; 214pp; English.
The present invention describes a human genome-derived myosin-like
protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
1 can be used in gene therapy and vaccine production. The hGDMLP-1
nucleic acids can be used as probes to detect, characterize and quantify
hGDMLP-1 nucleic acids in samples, as amplification substrates, to
provide initial substrates for the recombinant engineering of hGDMLP-1
protein variants having desired phenotypic improvements, and for
expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
used as immunogens to raise antibodies that specifically recognise hGDMLP-
1 proteins, as standards in assays used to determine the concentration
and/or amount specifically of hGDMLP proteins, as specific biomolecule
capture probes for surface-enhanced laser desorption ionisation, as
therapeutic supplement in patients having specific deficiency in hGDMLP-1
production, and in vaccines or for replacement therapy. The
polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
disorder associated with the expression of hGDMLP-1, in particular heart
and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
The present sequence represents an oligomer used in the screening of the
hGDMLP-1 sequence in the exemplification of the present invention. N.B.
The sequence data for this patent did not form part of the printed
specification, but was obtained in electronic format directly from WIPO
at ftp.wipo.int/pub/published_pct_sequence
Sequence 17 BP; 6 A; 3 C; 8 G; 0 T; 0 U; 0 Other;
Query Match 15.3%; Score 11.2; DB 1; Length 17;
Best Local Similarity 81.2%; Pred. No. 7.9e+02;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 934 CTCCTCTTCATTGGTT 949
Db 16 CTCCTCTTCATTGGCT 1
RESULT 265
ABV85535
ID ABV85535 standard; DNA; 17 BP.
XX
AC ABV85535;
XX
DT 11-DEC-2002 (first entry)
XX
DE Human pp-GaNTase 10 scanning 17-mer SEQ ID NO:528.
XX
KW Human; UDP-GalNAC:polypeptide N-acetylgalactosaminyltransferase 10;
KW pp-GaNTase 10; EC 2.4.1.41; chromosome 7q11.2; gene therapy; scanning;
ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN EP1243660-A2.
XX
PD 25-SEP-2002.
XX
PF 25-JAN-2002; 2002EP-00001161.
XX
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 23-MAY-2001; 2001US-00864761.
PR 30-AUG-2001; 2001US-0315984P.
XX
XX (AEOM-) AEOMICA INC.
XX
PI Zhang J, Gu Y, Nguyen C;
XX
XX WPI; 2002-724954/79.
XX
PT Nucleic acid encoding human UDP-GalNAC:polypeptide N-
PT cetylalactosaminyltransferase 10 protein is useful to diagnose, prevent
PT and treat disorders associated with reduced or over expression of the
PT encoded protein.
XX
PS Example 2; SEQ ID NO 528; 59pp; English.
XX
CC The present invention describes an isolated nucleic acid (I) encoding a
CC human UDP-GalNAC:polypeptide N-acetylgalactosaminyltransferase 10 (pp-
CC GaNTase 10, EC 2.4.1.41) protein. Human pp-GaNTase 10 is located to
CC chromosome 7q11.2. (I) can be used in gene therapy. Molecules of the
CC present invention can be used in therapy, particularly to prevent or
CC treat a disorder associated with decreased expression or activity of pp-
CC GaNTase. The sequences given in ABV85011 to ABV86689 and ABP3502 to
CC ABP3504 are given in the exemplification of the present invention. N.B.
CC The sequence data for this patent is not represented in the printed
CC specification but is based on sequence information supplied by the
CC European Patent Office
XX
SQ Sequence 17 BP; 6 A; 4 C; 0 G; 7 T; 0 U; 0 Other;
Query Match 15.3%; Score 11.2; DB 1; Length 17;
Best Local Similarity 81.2%; Pred. No. 7.9e+02;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 929 TATCCCTCTCTTCAT 944
Db 2 TATCCATCATATTCAT 17

Query Match 15.3%; Score 11.2; DB 1; Length 17;
 Best Local Similarity 81.2%; Pred. No. 7.9e+02;
 Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

907 ATTTCCTTTGGTCTTT 922
 | | | | | | | | | | | | | | | | | |
 1 AGTTTCTATGGGCTTT 16

RESULT 268
 3K25931/c
 1 ABK25931 standard; DNA; 17 BP.
 1 ABK25931;
 09-APR-2002 (first entry)
 Amino acid overproduction conferring genome altering oligonucleotide #3.

Chromosomal genomic alteration; genome altering oligonucleotide; PCR; ss;
 o-methyl modification; LNA modification; phosphorothioate linkage;
 DNA repair; DNA alteration; environmental tolerance; hygromycin-B;
 abiotic stress tolerance; improved nutritional value; hygromycin-B;
 amino acid over production; herbicide resistance; glycosylase resistance;
 imidazolinone herbicide resistance; herbicide resistance; disease resistance;
 porphyrin herbicide resistance; triazine resistance; disease resistance;
 modified oil production; modified starch production; waxy starch;
 altered floral morphology; male-sterile plant; albino mutant;
 modified fatty acid content; reduced palmitate production; albino plant;
 increased stearate production; reduced palmitate acid production;
 photosynthetic process.
 Arabidopsis thaliana.
 Synthetic.
 WO200192512-A2.
 06-DEC-2001.
 01-JUN-2001; 2001WO-US017672.
 01-JUN-2000; 2000US-0208538P.
 30-OCT-2000; 2000US-0244989P.
 27-MAR-2001; 2001US-00818875.
 (UYDE) UNIV DELAWARE.
 Kmiec EB, Gamper HB, Rice MC, Kim J;
 WPI; 2002-106307/14.

New oligonucleotides with modified nuclease-resistant termini, useful for
 creating plants with desired phenotypes, e.g. stress tolerance, improved
 nutritional value, herbicide or disease resistance, or modified oil
 production.
 Claim 7; Page 122; 220pp; English.

The invention relates to an oligonucleotide for targeted alteration of a
 genetic sequence, which comprises a single-stranded oligonucleotide
 having a DNA domain. The DNA domain has at least one mismatch with
 respect to the genetic sequence to be altered and further comprises
 chemical modifications of the oligonucleotide. The chemical modifications
 consist of o-methyl modification, an LNA modification, two or more
 phosphorothioate linkages on a terminus, or a combination of any two or
 more of these modifications. The oligonucleotides are useful for
 directing repair or alteration of plant genetic information. The
 oligonucleotides are particularly useful for creating plants with desired
 phenotypes, e.g. environmental or abiotic stress tolerance, improved
 nutritional value (e.g. altering amino acid content of plants or
 conferring amino acid over production), herbicide resistance (e.g.
 glyphosate resistance, imidazolinone and sulphonylurea herbicide
 resistance, porphyrin herbicide resistance or triazine resistance),

CC disease resistance, modified oil production, modified starch production
 CC (e.g. increased starch or production of waxy starch), altered floral
 CC morphology (e.g. male-sterile plants) or modified fatty acid content
 CC (e.g. reduced palmitate, increased stearate or reduced linolenic acid).
 CC The oligonucleotides are also useful for producing albino mutants for the
 CC analysis of photosynthetic processes. This sequence represents a genome
 CC altering oligonucleotide of the invention
 XX
 SQ Sequence 17 BP; 8 A; 4 C; 2 G; 3 T; 0 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;
 Best Local Similarity 81.2%; Pred. No. 7.9e+02;
 Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

907 ATTTCCTTTGGTCTTT 922
 | | | | | | | | | | | | | | | | | |
 17 AGTTTCTATGGGCTTT 2

RESULT 269
 ABV82837
 ID ABV82837 standard; DNA; 17 BP.
 XX
 AC ABV82837;
 XX
 DT 03-JAN-2003 (first entry)
 DE Human HTPL scanning oligonucleotide SEQ ID 4083.
 XX
 KW Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
 KW human testis expressed Patched like protein; testis; adrenal; liver;
 KW male germ cell development; bone marrow; brain; kidney; lung; placenta;
 KW prostate; skeletal muscle; colon; male infertility; cancer; ss.
 XX
 OS Homo sapiens.
 XX
 PN EP1229046-A2.
 XX
 PD 07-AUG-2002.
 XX
 PF 28-JAN-2002; 2002EP-00001167.
 XX
 PR 30-JAN-2001; 2001WO-US000663.
 PR 30-JAN-2001; 2001WO-US000664.
 PR 30-JAN-2001; 2001WO-US000665.
 PR 30-JAN-2001; 2001WO-US000667.
 PR 30-JAN-2001; 2001WO-US000668.
 PR 30-JAN-2001; 2001WO-US000669.
 PR 23-MAY-2001; 2001US-00864761.
 PR 09-OCT-2001; 2001US-0327898P.
 XX
 PA (ABOM-) ABOMICA INC.
 XX
 PI Zhan J;
 XX
 WPI; 2002-676582/73.

Novel isolated human testis expressed Patched like protein (HTPL), useful
 for identifying agonist and antagonist and specific binding partners, and
 for treating subjects having defects in HTPL.
 Example 2; Page 599; 718pp; English.

The present invention relates to human testis expressed Patched like
 protein (HTPL, see ABV8759 to ABV8762 and ABV8763 to ABV8765). HTPL
 has two isoforms, with a few single base pair differences between the
 two. One of the single base pair changes introduces a premature stop
 codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
 shares an overall structure organisation with the Patched protein. The
 shared structural features strongly imply that HTPL plays a role similar
 to that of Patched, and is a potential tumour suppressor. HTPL is
 important in regulating male germ cell development, and the HTPL gene was
 mapped to human chromosome 10p12.1. HTPL and its coding sequence are

CC useful for diagnosing a disorder caused by mutation in HTPL, and in
 CC therapy and manufacture of a medicament for treatment or prevention of
 CC such disorder associated with decreased expression or activity of human
 CC HTPL. Such disorders include disorders of testis, or adrenal, adult and
 CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
 CC skeletal muscle or colon function. HTPL proteins and nucleic acids are
 CC clinically useful diagnostic markers and potential therapeutic agents for
 CC male infertility and cancer. The present oligonucleotide was used in an
 CC example from the invention
 CC
 XX SQ Sequence 17 BP; 2 A; 4 C; 2 G; 9 T; 0 U; 0 Other;
 Query Match 15.3%; Score 11.2; DB 1; Length 17;
 Best Local Similarity 81.2%; Pred. No. 7.9e+02;
 Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 935 TCCCTCTTCATTGGTTT 950
 ||||| ||||| |||||
 Db 1 TCCTATGCATTGTTT 16
 RESULT 270
 ABV82836
 ID ABV82836 standard; DNA; 17 BP.
 XX
 AC ABV82836;
 XX
 DT 03-JAN-2003 (first entry)
 XX
 DE Human HTPL scanning oligonucleotide SEQ ID 4082.
 XX
 KW Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
 KW human testis expressed Patched like protein; testis; adrenal; liver;
 KW male germ cell development; bone marrow; brain; kidney; lung; placenta;
 KW prostate; skeletal muscle; colon; male infertility; cancer; ss.
 XX
 OS Homo sapiens.
 XX
 PN EP1229046-A2.
 XX
 PJ 07-AUG-2002.
 XX
 PF 28-JAN-2002; 2002EP-00001167.
 XX
 PR 30-JAN-2001; 2001WO-US0000663.
 PR 30-JAN-2001; 2001WO-US0000664.
 PR 30-JAN-2001; 2001WO-US0000665.
 PR 30-JAN-2001; 2001WO-US0000667.
 PR 30-JAN-2001; 2001WO-US0000668.
 PR 30-JAN-2001; 2001WO-US0000669.
 PR 23-MAY-2001; 2001US-00864761.
 PR 09-OCT-2001; 2001US-0327898P.
 XX
 PA (ABOM-) ABOMICA INC.
 XX
 PI Zhan J;
 XX
 DR WPI; 2002-676582/73.
 XX
 PT Novel isolated human testis expressed Patched like protein (HTPL), useful
 PT for identifying agonist and antagonist and specific binding partners, and
 PT for treating subjects having defects in HTPL.
 XX
 PS Example 2; Page 599; 718pp; English.
 CC
 CC The present invention relates to human testis expressed Patched like
 CC protein (HTPL, see ABV78759 to ABV78762 and ABV98519 to ABV98520). HTPL
 CC has two isoforms, with a few single base pair differences between the
 CC two. One of the single base pair changes introduces a premature stop
 CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
 CC shares an overall structure organisation with the Patched protein. The
 CC shared structural features strongly imply that HTPL plays a role similar
 CC to that of Patched, and is a potential tumour suppressor. HTPL is

CC important in regulating male germ cell development, and the HTPL gene was
 CC mapped to human chromosome 10p12.1. HTPL and its coding sequence are
 CC useful for diagnosing a disorder caused by mutation in HTPL, and in
 CC therapy and manufacture of a medicament for treatment or prevention of
 CC such disorder associated with decreased expression or activity of human
 CC HTPL. Such disorders include disorders of testis, or adrenal, adult and
 CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
 CC skeletal muscle or colon function. HTPL proteins and nucleic acids are
 CC clinically useful diagnostic markers and potential therapeutic agents for
 CC male infertility and cancer. The present oligonucleotide was used in an
 CC example from the invention
 CC
 XX SQ Sequence 17 BP; 2 A; 3 C; 2 G; 10 T; 0 U; 0 Other;
 Query Match 15.3%; Score 11.2; DB 1; Length 17;
 Best Local Similarity 81.2%; Pred. No. 7.9e+02;
 Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 935 TCCCTCTTCATTGGTTT 950
 ||||| ||||| |||||
 Db 2 TCCTATGCATTGTTT 17
 RESULT 271
 ABK18613/c
 ID ABK18613 standard; RNA; 17 BP.
 XX
 AC ABK18613;
 XX
 DT 09-APR-2002 (first entry)
 XX
 DE Human ERG G-cleaver ribozyme target sequence Seq ID No 1260.
 XX
 KW Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
 KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
 KW vulvar; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
 KW tumour angiogenesis; diabetic retinopathy; macular degeneration;
 KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
 KW angiofibroma of tuberosus sclerosis; port-wine stain; wound healing;
 KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
 KW Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNazyme; inozyme;
 KW amberszyme.
 XX
 OS Homo sapiens.
 XX
 PN WO200188124-A2.
 XX
 PD 22-NOV-2001.
 XX
 PE 16-MAY-2001; 2001WO-US015866.
 XX
 PR 16-MAY-2000; 2000US-00572021.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 PA (GLAXO) GLAXO GROUP LTD.
 XX
 PI Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;
 XX
 DR WPI; 2002-082995/11.
 XX
 PT Novel polynucleotide which down regulates expression of Ets-related gene,
 PT useful for treating cancer, diabetic retinopathy, macular degeneration,
 PT arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
 XX
 PS Claim 4; Page 83; 149pp; English.
 CC
 CC The invention relates to a nucleic acid molecule (I) which down regulates
 CC expression of an Ets-related gene (ERG). (I) is useful for treating
 CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
 CC tumour angiogenesis, diabetic retinopathy, macular degeneration,
 CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
 CC vulgaris, angiofibroma of tuberosus sclerosis, port-wine stains, Sturge
 CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu

syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for treating a patient having a condition associated with the level of ERG, by contacting cells of the patient with (I) under conditions suitable for the treatment. The method comprises the use of one or more therapies under conditions suitable for the treatment. Leukaemia or tumour angiogenesis is treated by administering (I) to the patient in conjunction with one or more of other therapies such as radiation or chemotherapy treatment. (I) is useful for reducing ERG activity in a cell, by contacting the cell with (I). (I) is useful for cleaving RNA of ERG gene, by contacting (I) with RNA, in the presence of a divalent cation such as Mg²⁺. (I) is useful for diagnosis of conditions and diseases related to the expression of ERG, and as diagnostic tool to examine genetic drift and mutations within diseased cells or to detect the presence of ERG RNA in a cell. (I) is useful for specifically targeting genes that share homology with ERG gene or ERG fusion genes. ABK17354-ABK22719 represent nucleic acids, including antisense and enzymatic nucleic acid molecules which regulate expression of ERG, and related PCR primers of the invention

Sequence 17 BP; 10 A; 1 C; 5 G; 0 T; 1 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;

Best Local Similarity 81.2%; Pred. No. 7.9e+02;

Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

925 CTTTATCCCTCTCT 940

16 CTTTTCATCTCTCT 1

RESULT 272

ABK19015/c

ABK19015 standard; RNA; 17 BP.

ABK19015;

09-APR-2002 (first entry)

Human ERG DNAzyme target sequence Seq ID No 1662.

Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic; ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic; vulnery; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis; tumour angiogenesis; diabetic retinopathy; macular degeneration; neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris; angiofibroma of tuberous sclerosis; port-wine stain; wound healing; Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss; Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme; amberzyme.

Homo sapiens.

WO200188124-A2.

22-NOV-2001.

16-MAY-2001; 2001WO-US015866.

16-MAY-2000; 2000US-00572021.

(RIBO-) RIBOZYME PHARM INC.
(GLAX) GLAXO GROUP LTD.

Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;

WPI; 2002-082995/11.

Novel polynucleotide which down regulates expression of Ets-related gene, useful for treating cancer, diabetic retinopathy, macular degeneration, arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.

Claim 4; Page 106; 149pp; English.

The invention relates to a nucleic acid molecule (I) which down regulates expression of an Ets-related gene (ERG). (I) is useful for treating conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma, tumour angiogenesis, diabetic retinopathy, arthritis, psoriasis, verruca neovascular glaucoma, myopic degeneration, macular degeneration, Sturge vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for treating a patient having a condition associated with the level of ERG, by contacting cells of the patient with (I) under conditions suitable for the treatment. The method comprises the use of one or more therapies under conditions suitable for the treatment. Leukaemia or tumour angiogenesis is treated by administering (I) to the patient in conjunction with one or more of other therapies such as radiation or chemotherapy treatment. (I) is useful for reducing ERG activity in a cell, by contacting the cell with (I). (I) is useful for cleaving RNA of ERG gene, by contacting (I) with RNA, in the presence of a divalent cation such as Mg²⁺. (I) is useful for diagnosis of conditions and diseases related to the expression of ERG, and as diagnostic tool to examine genetic drift and mutations within diseased cells or to detect the presence of ERG RNA in a cell. (I) is useful for specifically targeting genes that share homology with ERG gene or ERG fusion genes. ABK17354-ABK22719 represent nucleic acids, including antisense and enzymatic nucleic acid molecules which regulate expression of ERG, and related PCR primers of the invention

Sequence 17 BP; 11 A; 1 C; 4 G; 0 T; 1 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;

Best Local Similarity 81.2%; Pred. No. 7.9e+02;

Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 926 TTTTATCCCTCTCT 941

DB 17 TTTTTCATCTCTCT 2

RESULT 273

ABK18354/c

ID ABK18354 standard; RNA; 17 BP.

AC ABK18354;

DT 09-APR-2002 (first entry)

Human ERG hammerhead ribozyme target sequence, Seq ID No 1001.

Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic; ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic; KW vulnery; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis; KW tumour angiogenesis; diabetic retinopathy; macular degeneration; KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris; KW angiofibroma of tuberous sclerosis; port-wine stain; wound healing; KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss; KW Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme; KW amberzyme.

OS Homo sapiens.

XX WO200188124-A2.

PN 22-NOV-2001.

XX 16-MAY-2001; 2001WO-US015866.

XX 16-MAY-2000; 2000US-00572021.

XX (RIBO-) RIBOZYME PHARM INC.
XX (GLAX) GLAXO GROUP LTD.

PI Jarvis T, Von Carlowitz I, Mcswiggen JA, McLaughlin F, Randi AM;

XX WPI; 2002-082995/11.

```

XX Novel polynucleotide which down regulates expression of Ets-related gene,
PT useful for treating cancer, diabetic retinopathy, macular degeneration,
PT arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
XX
XX Claim 4; Page 77; 149pp; English.
XX
XX The invention relates to a nucleic acid molecule (I) which down regulates
CC expression of an Ets-related gene (ERG). (I) is useful for treating
CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
CC tumour angiogenesis, diabetic retinopathy, macular degeneration,
CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
CC vulgaris, angiofibroma of tuberosus sclerosis, port-wine stains, Sturge
CC Weber syndrome, Kipfel-Trenauay-Weber syndrome, Osler-Weber-rendu
CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
CC treating a patient having a condition associated with the level of ERG,
CC by contacting cells of the patient with (I) under conditions suitable for
CC the treatment. The method comprises the use of one or more therapies
CC under conditions suitable for the treatment. Leukaemia or tumour
CC angiogenesis is treated by administering (I) to the patient in
CC conjunction with one or more of other therapies such as radiation or
CC chemotherapy treatment. (I) is useful for reducing ERG activity in a
CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
CC ERG gene, by contacting (I) with RNA, in the presence of a divalent
CC cation such as Mg2+. (I) is useful for diagnosis of conditions and
CC diseases related to the expression of ERG, and as diagnostic tool to
CC examine genetic drift and mutations within diseased cells or to detect
CC the presence of ERG RNA in a cell. (I) is useful for specifically
CC targeting genes that share homology with ERG gene or ERG fusion genes.
CC ABK17354-ABK22719 represent nucleic acids, including antisense and
CC enzymatic nucleic acid molecules which regulate expression of ERG, and
CC related PCR primers of the invention
XX
XX Sequence 17 BP; 12 A; 2 C; 2 G; 0 T; 1 U; 0 Other;
SQ
Query Match 15.3%; Score 11.2; DB 1; Length 17;
Best Local Similarity 81.2%; Pred. No. 7.9e+02;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 908 TTTTCTTTGGTCTTTG 923
Db 17 TTTTCTTCTGTTTGT 2

RESULT 274
ABS75096/c
ID ABS75096 standard; DNA; 17 BP.
XX
XX ABS75096;
XX
XX 24-DEC-2002 (first entry)
XX
XX Human PAPP-Ea associated 17-mer SEQ ID 622.
XX
XX PAPP-E; human; pregnancy associated plasma protein E; abortive;
XX contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis;
XX dyegenetic pregnancy; primer; ss.
XX
XX Homo sapiens.
XX
XX US2002102252-A1.
XX
XX 01-AUG-2002.
XX
XX 06-APR-2001; 2001US-00827998.
XX
XX 26-MAY-2000; 2000US-0207456P.
XX
XX (GUY)/ GU Y.
XX (SHAN/) SHANNON M E.
XX
XX Gu Y, Shannon ME;
XX
XX WPI; 2002-697817/75.
XX
XX New isolated nucleic acid encoding an isoform of human pregnancy
XX associated plasma protein E, for preventing or aborting pregnancy.
XX
XX Example 2; Page 156; 353pp; English.
XX
XX This invention describes a novel isolated nucleic acid that encodes one
XX of three new isoforms of human pregnancy associated plasma protein E,
XX of three new isoforms of human pregnancy associated plasma protein E,
XX hPAPP-E. The products of the invention have abortive and contraceptive
XX activity and can be used for gene therapy or in a vaccine. The nucleic
XX acid, polypeptide encoded by it, or antibody to the polypeptide can be
XX used in pharmaceutical compositions or vaccines for preventing or
XX aborting pregnancy. PAPP-E is used in the antenatal diagnosis of
XX dyegenetic pregnancies. The nucleic acids are used as probes to assess
XX the level of PAPP-E isoform mRNA in chorionic villus samples, and the
XX antibodies can be used to assess the expression levels of PAPP-E isoform
XX proteins in chorionic villus samples, to diagnose dyegenetic pregnancies
XX antenatally. This sequence represents an oligomer used in scanning the
XX human PAPP-E genes described in the disclosure of the invention
XX
XX Sequence 17 BP; 6 A; 4 C; 6 G; 1 T; 0 U; 0 Other;
SQ
Query Match 15.3%; Score 11.2; DB 1; Length 17;
Best Local Similarity 81.2%; Pred. No. 7.9e+02;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 922 TGCCTTTTATCCCTCC 937
Db 16 TGGCTTCTATGCTCC 1

RESULT 275
ABS75095/c
ID ABS75095 standard; DNA; 17 BP.
XX
XX ABS75095;
XX
XX 24-DEC-2002 (first entry)
XX
XX Human PAPP-Ea associated 17-mer SEQ ID 621.
XX
XX PAPP-E; human; pregnancy associated plasma protein E; abortive;
XX contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis;
XX dyegenetic pregnancy; primer; ss.
XX
XX Homo sapiens.
XX
XX US2002102252-A1.
XX
XX 01-AUG-2002.
XX
XX 06-APR-2001; 2001US-00827998.
XX
XX 26-MAY-2000; 2000US-0207456P.
XX
XX (GUY)/ GU Y.
XX (SHAN/) SHANNON M E.
XX
XX Gu Y, Shannon ME;
XX
XX WPI; 2002-697817/75.
XX
XX New isolated nucleic acid encoding an isoform of human pregnancy
XX associated plasma protein E, for preventing or aborting pregnancy.
XX
XX Example 2; Page 156; 353pp; English.
XX
XX This invention describes a novel isolated nucleic acid that encodes one
XX of three new isoforms of human pregnancy associated plasma protein E,
XX of three new isoforms of human pregnancy associated plasma protein E,
XX hPAPP-E. The products of the invention have abortive and contraceptive
XX activity and can be used for gene therapy or in a vaccine. The nucleic
XX acid, polypeptide encoded by it, or antibody to the polypeptide can be

```

```

DR WPI; 2002-697817/75.
XX
XX New isolated nucleic acid encoding an isoform of human pregnancy
PT associated plasma protein E, for preventing or aborting pregnancy.
XX
XX Example 2; Page 157; 353pp; English.
XX
XX This invention describes a novel isolated nucleic acid that encodes one
CC of three new isoforms of human pregnancy associated plasma protein E,
CC hPAPP-E. The products of the invention have abortive and contraceptive
CC activity and can be used for gene therapy or in a vaccine. The nucleic
CC acid, polypeptide encoded by it, or antibody to the polypeptide can be
CC used in pharmaceutical compositions or vaccines for preventing or
CC aborting pregnancy. PAPP-E is used in the antenatal diagnosis of
CC dyegenetic pregnancies. The nucleic acids are used as probes to assess
CC the level of PAPP-E isoform mRNA in chorionic villus samples, and the
CC antibodies can be used to assess the expression levels of PAPP-E isoform
CC proteins in chorionic villus samples, to diagnose dyegenetic pregnancies
CC antenatally. This sequence represents an oligomer used in scanning the
CC human PAPP-E genes described in the disclosure of the invention
XX
XX Sequence 17 BP; 6 A; 4 C; 6 G; 1 T; 0 U; 0 Other;
SQ
Query Match 15.3%; Score 11.2; DB 1; Length 17;
Best Local Similarity 81.2%; Pred. No. 7.9e+02;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 922 TGCCTTTTATCCCTCC 937
Db 16 TGGCTTCTATGCTCC 1

```

```

RESULT 275
ABS75095/c
ID ABS75095 standard; DNA; 17 BP.
XX
XX ABS75095;
XX
XX 24-DEC-2002 (first entry)
XX
XX Human PAPP-Ea associated 17-mer SEQ ID 621.
XX
XX PAPP-E; human; pregnancy associated plasma protein E; abortive;
XX contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis;
XX dyegenetic pregnancy; primer; ss.
XX
XX Homo sapiens.
XX
XX US2002102252-A1.
XX
XX 01-AUG-2002.
XX
XX 06-APR-2001; 2001US-00827998.
XX
XX 26-MAY-2000; 2000US-0207456P.
XX
XX (GUY)/ GU Y.
XX (SHAN/) SHANNON M E.
XX
XX Gu Y, Shannon ME;
XX
XX WPI; 2002-697817/75.
XX
XX New isolated nucleic acid encoding an isoform of human pregnancy
XX associated plasma protein E, for preventing or aborting pregnancy.
XX
XX Example 2; Page 156; 353pp; English.
XX
XX This invention describes a novel isolated nucleic acid that encodes one
XX of three new isoforms of human pregnancy associated plasma protein E,
XX of three new isoforms of human pregnancy associated plasma protein E,
XX hPAPP-E. The products of the invention have abortive and contraceptive
XX activity and can be used for gene therapy or in a vaccine. The nucleic
XX acid, polypeptide encoded by it, or antibody to the polypeptide can be

```

used in pharmaceutical compositions or vaccines for preventing or aborting pregnancy. PAPP-E is used in the antenatal diagnosis of dysgenetic pregnancies. The nucleic acids are used as probes to assess the level of PAPP-E isoform mRNA in chorionic villus samples, and the antibodies can be used to assess the expression levels of PAPP-E isoform proteins in chorionic villus samples, to diagnose dysgenetic pregnancies antenatally. This sequence represents an oligomer used in scanning the human PAPP-E genes described in the disclosure of the invention

Sequence 17 BP; 6 A; 3 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;

Best Local Similarity 81.2%; Pred. No. 7.9e+02;

Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

922 TGCCTTTATCCCTCC 937

17 TGGCTTCTATGCTCC 2

RESULT 276

ABK56283/c

ABK56283 standard; RNA; 17 BP.

ABK56283;

02-JUL-2002 (first entry)

Human CLCA1 gene enzymatic nucleic acid #654.

Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic; antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma; chronic bronchitis; cystic fibrosis; obstructive bowel syndrome; oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic; acetylcysteine.

Homo sapiens.

WO200211674-A2.

14-FEB-2002.

09-AUG-2001; 2001WO-US024970.

09-AUG-2000; 2000US-0224383P.

(RIBO-) RIBOZYME PHARM INC.

(SYNT) SYNTEX USA LLC.

(THOM/) THOMPSON J.

Thompson J, Mcswiggen J, McKenzie T, Ayers D, Szymkowski DE; Grupe A;

WPI; 2002-217145/27.

Enzymatic polynucleotide that down regulates expression of chloride channel calcium activated gene, useful for treating Chronic obstructive pulmonary disease (COPD), chronic bronchitis and asthma.

Claim 4; Page 66; 152pp; English.

The invention relates to enzymatic nucleic acid molecules that down regulate expression of chloride channel calcium activated 1 (CLCA1) genes by cleaving RNA derived from the genes. The nucleic acid sequences are useful as pharmaceutical agents for treating conditions such as chronic obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic fibrosis, obstructive bowel syndrome and any other diseases or conditions that are related to or will respond to the levels of CLCA1 in a cell or tissue. The sequences are useful for reducing CLCA1 activity in a cell, hence, are useful for treatment of a patient having a condition associated with the level of CLCA1, where the invention further comprises the use of one or more therapies under conditions suitable for the treatment, for example, oxygen therapy, bronchodilators, corticosteroids,

CC antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The nucleic acids of the invention are also used as diagnostic tools to examine genetic drift and mutations within diseased cells or to detect the presence of CLCA1 RNA in a cell. This sequence represents an enzymatic nucleic acid molecule of the invention

SQ Sequence 17 BP; 9 A; 3 C; 2 G; 0 T; 3 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;

Best Local Similarity 81.2%; Pred. No. 7.9e+02;

Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

OY 939 CTTTCATTGGTTAATG 954

16 CTTTATTTGTTGAATG 1

RESULT 277

ABK56418

ID ABK56418 standard; RNA; 17 BP.

AC ABK56418;

DT 02-JUL-2002 (first entry)

Human CLCA1 gene enzymatic nucleic acid #789.

Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic; antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma; chronic bronchitis; cystic fibrosis; obstructive bowel syndrome; oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic; acetylcysteine.

Homo sapiens.

WO200211674-A2.

14-FEB-2002.

09-AUG-2001; 2001WO-US024970.

09-AUG-2000; 2000US-0224383P.

(RIBO-) RIBOZYME PHARM INC.

(SYNT) SYNTEX USA LLC.

(THOM/) THOMPSON J.

Thompson J, Mcswiggen J, McKenzie T, Ayers D, Szymkowski DE; Grupe A;

WPI; 2002-217145/27.

Enzymatic polynucleotide that down regulates expression of chloride channel calcium activated gene, useful for treating Chronic obstructive pulmonary disease (COPD), chronic bronchitis and asthma.

Claim 4; Page 70; 152pp; English.

The invention relates to enzymatic nucleic acid molecules that down regulate expression of chloride channel calcium activated 1 (CLCA1) genes by cleaving RNA derived from the genes. The nucleic acid sequences are useful as pharmaceutical agents for treating conditions such as chronic obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic fibrosis, obstructive bowel syndrome and any other diseases or conditions that are related to or will respond to the levels of CLCA1 in a cell or tissue. The sequences are useful for reducing CLCA1 activity in a cell, hence, are useful for treatment of a patient having a condition associated with the level of CLCA1, where the invention further comprises the use of one or more therapies under conditions suitable for the treatment, for example, oxygen therapy, bronchodilators, corticosteroids, antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The nucleic acids of the invention are also used as diagnostic tools to examine genetic drift and mutations within diseased cells or to detect

CC the presence of CLCA1 RNA in a cell. This sequence represents an
CC enzymatic nucleic acid molecule of the invention
XX
SQ Sequence 17 BP; 4 A; 7 C; 0 G; 0 T; 6 U; 0 Other;
Query Match 15.3%; Score 11.2; DB 1; Length 17;
Best Local Similarity 50.0%; Pred. No. 7.9e+02;
Matches 8; Conservative 5; Mismatches 3; Indels 0; Gaps 0;
QY 930 ATCCCTCCTCTTCATT 945
:|||||: :|||:
Db 2 AUCCACCUUCUCAU 17

RESULT 278
ABK55849
ID ABK55849 standard; RNA; 17 BP.
XX
AC ABK55849;
XX
DT 02-JUL-2002 (first entry)
XX
DE Human CLCA1 gene enzymatic nucleic acid #220.
XX
KW Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;
KW antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;
KW chronic bronchitis; cystic fibrosis; obstructive bowel syndrome; mucokinetic;
KW oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;
KW acetylcysteine.
XX
OS Homo sapiens.
XX
FN WO200211674-A2.
XX
PD 14-FEB-2002.
XX
PF 09-AUG-2001; 2001WO-US024970.
XX
PR 09-AUG-2000; 2000US-0224383P.
XX
FA (RIBO-) RIBOZYME PHARM INC.
FA (SYNT) SYNTEX USA LLC.
FA (THOM/) THOMPSON J.
XX
PI Thompson J, Mcswiggen J, Mckenzie T, Ayers D, Szymkowski DE;
PI Grupe A;
XX
WPI; 2002-217145/27.
XX
PT Enzymatic polynucleotide that down regulates expression of chloride
PT channel calcium activated gene, useful for treating Chronic obstructive
PT pulmonary disease (COPD), chronic bronchitis and asthma.
XX
FS Claim 4; Page 56; 152pp; English.
XX
CC The invention relates to enzymatic nucleic acid molecules that down
CC regulate expression of chloride channel calcium activated 1 (CLCA1) genes
CC by cleaving RNA derived from the genes. The nucleic acid sequences are
CC useful as pharmaceutical agents for treating conditions such as chronic
CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic
CC fibrosis, obstructive bowel syndrome and any other diseases or conditions
CC that are related to or will respond to the levels of CLCA1 in a cell or
CC tissue. The sequences are useful for reducing CLCA1 activity in a cell,
CC hence, are useful for treatment of a patient having a condition
CC associated with the level of CLCA1, where the invention further comprises
CC the use of one or more therapies under conditions suitable for the
CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,
CC antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The
CC nucleic acids of the invention are also used as diagnostic tools to
CC examine genetic drift and mutations within diseased cells or to detect
CC the presence of CLCA1 RNA in a cell. This sequence represents an
CC enzymatic nucleic acid molecule of the invention
XX

SQ Sequence 17 BP; 2 A; 8 C; 1 G; 0 T; 6 U; 0 Other;
Query Match 15.3%; Score 11.2; DB 1; Length 17;
Best Local Similarity 50.0%; Pred. No. 7.9e+02;
Matches 8; Conservative 5; Mismatches 3; Indels 0; Gaps 0;
QY 931 TCCCTCCTCTTCATTG 946
:|||||: :|||:
Db 1 UCCACCUUCUCAUUG 16

RESULT 279
ACC52807
ID ACC52807 standard; DNA; 17 BP.
XX
AC ACC52807;
XX
DT 27-JUN-2003 (first entry)
XX
DE Human tumour suppressor sequence #1574.
XX
KW ss; tumour suppressor; antitumour; cytostatic; tumour suppression;
KW tumour regression; apoptosis; virus resistance; diagnosis;
KW cellular degeneration.
XX
OS Homo sapiens.
XX
FN FR2826373-A1.
XX
PD 27-DEC-2002.
XX
PF 20-JUN-2001; 2001FR-00008139.
XX
PR 20-JUN-2001; 2001FR-00008139.
XX
FA (MOLE-) MOLECULAR ENGINES LAB SA.
XX
PI Tuijnder M, Telerman A, Amson R;
XX
DR WPI; 2003-250498/25.
XX
PT New nucleic acid sequences associated with tumor suppression, regression,
PT apoptosis or virus resistance are useful to diagnose and treat viral
PT disease, development of tumor cells and cell degeneration.
XX
FS Claim 1; Page 404; 798pp; French.
XX
CC This sequence represents an isolated nucleic acid sequence associated
CC with tumour suppression or regression, apoptosis or virus resistance. The
CC invention relates to these sequences or sequences having at least 80%
CC identity to them, and polypeptides encoded by the sequences or
CC polypeptides having 80% identity to the polypeptide sequences. The
CC invention is used to diagnose or treat viral disease or disease
CC characterized by development of tumour cells or cellular degeneration
XX
SQ Sequence 17 BP; 4 A; 6 C; 1 G; 6 T; 0 U; 0 Other;
Query Match 15.3%; Score 11.2; DB 1; Length 17;
Best Local Similarity 81.2%; Pred. No. 7.9e+02;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 930 ATCCCTCCTCTTCATT 945
:|||||: :|||:
Db 2 ATCCCTCTCTTACAAT 17

RESULT 280
ACC52527/c
ID ACC52527 standard; DNA; 17 BP.
XX
AC ACC52527;
XX
DT 27-JUN-2003 (first entry)

```

1 Human tumour suppressor sequence #1294.
2
3 ss; tumour suppressor; antitumour; cytostatic; tumour suppression;
4 tumour regression; apoptosis; virus resistance; diagnosis;
5 cellular degeneration.
6
7 Homo sapiens.
8
9 FR2826373-A1.
10
11 27-DEC-2002.
12
13 20-JUN-2001; 2001FR-00008139.
14
15 20-JUN-2001; 2001FR-00008139.
16
17 (MOLE-) MOLECULAR ENGINES LAB SA.
18
19 Tuijnder M, Telerman A, Amson R;
20
21 WPI; 2003-250498/25.
22
23 New nucleic acid sequences associated with tumor suppression, regression,
24 apoptosis or virus resistance are useful to diagnose and treat viral
25 disease, development of tumor cells and cell degeneration.
26
27 Claim 1; Page 339; 798pp; French.
28
29 This sequence represents an isolated nucleic acid sequence associated
30 with tumour suppression or regression, apoptosis or virus resistance. The
31 invention relates to these sequences or sequences having at least 80%
32 identity to them, and polypeptides encoded by the sequences or
33 polypeptides having 80% identity to the polypeptide sequences. The
34 invention is used to diagnose or treat viral disease or disease
35 characterized by development of tumour cells or cellular degeneration
36
37 Sequence 17 BP; 5 A; 4 C; 1 G; 7 T; 0 U; 0 Other;
38
39 Query Match 15.3%; Score 11.2; DB 1; Length 17;
40 Best Local Similarity 81.2%; Pred. No. 7.9e+02;
41 Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
42
43 943 ATTGGTTTAAATGATC 958
44 ||||| ||||| |||||
45 16 ATTGGAAATGATC 1
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100
101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
163
164
165
166
167
168
169
170
171
172
173
174
175
176
177
178
179
180
181
182
183
184
185
186
187
188
189
190
191
192
193
194
195
196
197
198
199
200
201
202
203
204
205
206
207
208
209
210
211
212
213
214
215
216
217
218
219
220
221
222
223
224
225
226
227
228
229
230
231
232
233
234
235
236
237
238
239
240
241
242
243
244
245
246
247
248
249
250
251
252
253
254
255
256
257
258
259
260
261
262
263
264
265
266
267
268
269
270
271
272
273
274
275
276
277
278
279
280
281
282
283
284
285
286
287
288
289
290
291
292
293
294
295
296
297
298
299
300
301
302
303
304
305
306
307
308
309
310
311
312
313
314
315
316
317
318
319
320
321
322
323
324
325
326
327
328
329
330
331
332
333
334
335
336
337
338
339
340
341
342
343
344
345
346
347
348
349
350
351
352
353
354
355
356
357
358
359
360
361
362
363
364
365
366
367
368
369
370
371
372
373
374
375
376
377
378
379
380
381
382
383
384
385
386
387
388
389
390
391
392
393
394
395
396
397
398
399
400
401
402
403
404
405
406
407
408
409
410
411
412
413
414
415
416
417
418
419
420
421
422
423
424
425
426
427
428
429
430
431
432
433
434
435
436
437
438
439
440
441
442
443
444
445
446
447
448
449
450
451
452
453
454
455
456
457
458
459
460
461
462
463
464
465
466
467
468
469
470
471
472
473
474
475
476
477
478
479
480
481
482
483
484
485
486
487
488
489
490
491
492
493
494
495
496
497
498
499
500
501
502
503
504
505
506
507
508
509
510
511
512
513
514
515
516
517
518
519
520
521
522
523
524
525
526
527
528
529
530
531
532
533
534
535
536
537
538
539
540
541
542
543
544
545
546
547
548
549
550
551
552
553
554
555
556
557
558
559
560
561
562
563
564
565
566
567
568
569
570
571
572
573
574
575
576
577
578
579
580
581
582
583
584
585
586
587
588
589
590
591
592
593
594
595
596
597
598
599
600
601
602
603
604
605
606
607
608
609
610
611
612
613
614
615
616
617
618
619
620
621
622
623
624
625
626
627
628
629
630
631
632
633
634
635
636
637
638
639
640
641
642
643
644
645
646
647
648
649
650
651
652
653
654
655
656
657
658
659
660
661
662
663
664
665
666
667
668
669
670
671
672
673
674
675
676
677
678
679
680
681
682
683
684
685
686
687
688
689
690
691
692
693
694
695
696
697
698
699
700
701
702
703
704
705
706
707
708
709
710
711
712
713
714
715
716
717
718
719
720
721
722
723
724
725
726
727
728
729
730
731
732
733
734
735
736
737
738
739
740
741
742
743
744
745
746
747
748
749
750
751
752
753
754
755
756
757
758
759
760
761
762
763
764
765
766
767
768
769
770
771
772
773
774
775
776
777
778
779
780
781
782
783
784
785
786
787
788
789
790
791
792
793
794
795
796
797
798
799
800
801
802
803
804
805
806
807
808
809
810
811
812
813
814
815
816
817
818
819
820
821
822
823
824
825
826
827
828
829
830
831
832
833
834
835
836
837
838
839
840
841
842
843
844
845
846
847
848
849
850
851
852
853
854
855
856
857
858
859
860
861
862
863
864
865
866
867
868
869
870
871
872
873
874
875
876
877
878
879
880
881
882
883
884
885
886
887
888
889
890
891
892
893
894
895
896
897
898
899
900
901
902
903
904
905
906
907
908
909
910
911
912
913
914
915
916
917
918
919
920
921
922
923
924
925
926
927
928
929
930
931
932
933
934
935
936
937
938
939
940
941
942
943
944
945
946
947
948
949
950
951
952
953
954
955
956
957
958
959
960
961
962
963
964
965
966
967
968
969
970
971
972
973
974
975
976
977
978
979
980
981
982
983
984
985
986
987
988
989
990
991
992
993
994
995
996
997
998
999
1000

```

```

XX
PI Tuijnder M, Telerman A, Amson R;
XX
DR WPI; 2003-250498/25.
XX
XX New nucleic acid sequences associated with tumor suppression, regression,
XX apoptosis or virus resistance are useful to diagnose and treat viral
XX disease, development of tumor cells and cell degeneration.
XX
XX Claim 1; Page 782; 798pp; French.
XX
XX This sequence represents an isolated nucleic acid sequence associated
XX with tumour suppression or regression, apoptosis or virus resistance. The
XX invention relates to these sequences or sequences having at least 80%
XX identity to them, and polypeptides encoded by the sequences or
XX polypeptides having 80% identity to the polypeptide sequences. The
XX invention is used to diagnose or treat viral disease or disease
XX characterized by development of tumour cells or cellular degeneration
XX
XX Sequence 17 BP; 1 A; 2 C; 4 G; 10 T; 0 U; 0 Other;
XX
XX Query Match 15.3%; Score 11.2; DB 1; Length 17;
XX Best Local Similarity 81.2%; Pred. No. 7.9e+02;
XX Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 903 GGTCAATTTCTTTGGT 918
XX | | | | | | | | | | | | | | |
XX 1 GATCTTGTCTTTGGT 16
XX
XX
XX RESULT 282
XX ACC52830
XX ID ACC52830 standard; DNA; 17 BP.
XX
XX AC ACC52830;
XX
XX 27-JUN-2003 (first entry)
XX
XX DE Human tumour suppressor sequence #1597.
XX
XX ss; tumour suppressor; antitumour; cytostatic; tumour suppression;
XX tumour regression; apoptosis; virus resistance; diagnosis;
XX cellular degeneration.
XX
XX OS Homo sapiens.
XX
XX PN FR2826373-A1.
XX
XX PD 27-DEC-2002.
XX
XX PF 20-JUN-2001; 2001FR-00008139.
XX
XX PR 20-JUN-2001; 2001FR-00008139.
XX
XX (MOLE-) MOLECULAR ENGINES LAB SA.
XX
XX Tuijnder M, Telerman A, Amson R;
XX
XX WPI; 2003-250498/25.
XX
XX New nucleic acid sequences associated with tumor suppression, regression,
XX apoptosis or virus resistance are useful to diagnose and treat viral
XX disease, development of tumor cells and cell degeneration.
XX
XX Claim 1; Page 409; 798pp; French.
XX
XX This sequence represents an isolated nucleic acid sequence associated
XX with tumour suppression or regression, apoptosis or virus resistance. The
XX invention relates to these sequences or sequences having at least 80%
XX identity to them, and polypeptides encoded by the sequences or
XX polypeptides having 80% identity to the polypeptide sequences. The
XX invention is used to diagnose or treat viral disease or disease
XX characterized by development of tumour cells or cellular degeneration
XX

```

XX SQ Sequence 17 BP; 4 A; 5 C; 1 G; 7 T; 0 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;
Best Local Similarity 81.2%; Pred. No. 7.9e+02;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 930 ATCCCTCTCTTCATT 945
| | | | | | | | | |
DQ 2 ATCCCTCTCTTAAAT 17

RESULT 283

ABT36991/c
ID ABT36991 standard; DNA; 17 BP.

XX AC ABT36991;

DT 12-JUN-2003 (first entry)

XX Tumour suppression related human fukutin oligo SEQ ID No 2628.

XX Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
XX antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
XX schizophrenia; protein chip; gene therapy; tumour suppression;
XX human fukutin; ds.

XX OS Homo sapiens.

XX WO2003025175-A2.

XX 27-MAR-2003.

XX 17-SEP-2002; 2002WO-IB004208.

XX 17-SEP-2001; 2001FR-00011978.

XX (MOLE-) MOLECULAR ENGINES LAB.

XX Telerman A, Amson R, Tuijnder M;

XX WPI; 2003-313353/30.

XX New isolated nucleic acid, useful for treating viral diseases associated
XX with tumors and cell degeneration, also related polypeptides, antibodies
XX and transfected cells.

XX Disclosure; Page 340; 720pp; French.

XX The invention relates to a novel isolated 17 mer nucleic acid sequence,
XX given in the specification, a sequence containing at least 15 consecutive
XX nucleotides from the 17 mer sequence, a sequence with, after optimal
XX alignment, at least 80 % identity to the 17 mer sequence, a sequence that
XX hybridizes to them under highly stringent conditions, or the complement
XX of any of them, or the corresponding RNA. The novel isolated nucleic
XX acids of the invention are useful as probes and primers for detecting,
XX identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
XX component of a gene chip, in vitro as (anti)sense reagents, and for
XX production of recombinant polypeptides. Any of the nucleic acids,
XX polypeptides, vectors containing the nucleic acids, cells containing the
XX vector or antibodies directed against the polypeptides are useful for
XX preparation of pharmaceuticals for prevention and/or treatment of viral
XX diseases that are characterised by development of tumours or cell
XX degeneration, specifically cancer but also Alzheimer's disease and
XX schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
XX patient samples is useful for diagnosis and/or prognosis of these
XX diseases. The polypeptides can also be used to generate antibodies, and
XX both the polypeptide and antibodies are useful as components of protein
XX chips. The nucleic acid sequences of the invention can be used in gene
XX therapy. This polynucleotide sequence represents a tumour suppression
XX related human fukutin oligonucleotide of the invention

XX Sequence 17 BP; 6 A; 2 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;
Best Local Similarity 81.2%; Pred. No. 7.9e+02;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 933 CCTCCTCTTCATTGGT 948
| | | | | | | | | |
DQ 17 CATCCCTCTGCATTGAT 2

RESULT 284

ABT38451

ID ABT38451 standard; DNA; 17 BP.

XX AC ABT38451;

DT 12-JUN-2003 (first entry)

XX Tumour suppression related human fukutin oligo SEQ ID No 4088.

XX Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
XX antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
XX schizophrenia; protein chip; gene therapy; tumour suppression;
XX human fukutin; ds.

XX OS Homo sapiens.

XX WO2003025175-A2.

XX 27-MAR-2003.

XX 17-SEP-2002; 2002WO-IB004208.

XX 17-SEP-2001; 2001FR-00011978.

XX (MOLE-) MOLECULAR ENGINES LAB.

XX Telerman A, Amson R, Tuijnder M;

XX WPI; 2003-313353/30.

XX New isolated nucleic acid, useful for treating viral diseases associated
XX with tumors and cell degeneration, also related polypeptides, antibodies
XX and transfected cells.

XX Disclosure; Page 511; 720pp; French.

XX The invention relates to a novel isolated 17 mer nucleic acid sequence,
XX given in the specification, a sequence containing at least 15 consecutive
XX nucleotides from the 17 mer sequence, a sequence with, after optimal
XX alignment, at least 80 % identity to the 17 mer sequence, a sequence that
XX hybridizes to them under highly stringent conditions, or the complement
XX of any of them, or the corresponding RNA. The novel isolated nucleic
XX acids of the invention are useful as probes and primers for detecting,
XX identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
XX component of a gene chip, in vitro as (anti)sense reagents, and for
XX production of recombinant polypeptides. Any of the nucleic acids,
XX polypeptides, vectors containing the nucleic acids, cells containing the
XX vector or antibodies directed against the polypeptides are useful for
XX preparation of pharmaceuticals for prevention and/or treatment of viral
XX diseases that are characterised by development of tumours or cell
XX degeneration, specifically cancer but also Alzheimer's disease and
XX schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
XX patient samples is useful for diagnosis and/or prognosis of these
XX diseases. The polypeptides can also be used to generate antibodies, and
XX both the polypeptide and antibodies are useful as components of protein
XX chips. The nucleic acid sequences of the invention can be used in gene
XX therapy. This polynucleotide sequence represents a tumour suppression
XX related human fukutin oligonucleotide of the invention

XX Sequence 17 BP; 1 A; 3 C; 4 G; 9 T; 0 U; 0 Other;

XX Query Match 15.3%; Score 11.2; DB 1; Length 17;

```
Best Local Similarity 81.2%; Pred. No. 7.9e+02;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

/ 916 GGCCTTGGCTTTTAT 931
| | | | | | | | | | |
> 1 GATCTGCGCTTTGT 16

RESULT 285
BT38397
> ABT38397 standard; DNA; 17 BP.
<
< ABT38397;
<
< 12-JUN-2003 (first entry)
<
< Tumour suppression related human fukutin oligo SEQ ID No 4034.
<
< Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
< antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
< schizophrenia; protein chip; gene therapy; tumour suppression;
< human fukutin; ds.
<
< Homo sapiens.
<
< WO2003025175-A2.
<
< 27-MAR-2003.
<
< 17-SEP-2002; 2002WO-IB004208.
<
< 17-SEP-2001; 2001PR-00011978.
<
< (MOLE-) MOLECULAR ENGINES LAB.
<
< Telerman A, Amson R, Tuijnder M;
<
< WPI; 2003-313353/30.
<
< New isolated nucleic acid, useful for treating viral diseases associated
< with tumors and cell degeneration, also related polypeptides, antibodies
< and transfected cells.
<
< Disclosure; Page 505; 720pp; French.
<
< The invention relates to a novel isolated 17 mer nucleic acid sequence.
< given in the specification, a sequence containing at least 15 consecutive
< nucleotides from the 17 mer sequence, a sequence with, after optimal
< alignment, at least 80 % identity to the 17 mer sequence, a sequence that
< hybridizes to them under highly stringent conditions, or the complement
< of any of them, or the corresponding RNA. The novel isolated nucleic
< acids of the invention are useful as probes and primers for detecting,
< identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
< component of a gene chip, in vitro as (anti)sense reagents, and for
< production of recombinant polypeptides. Any of the nucleic acids,
< polypeptides, vectors containing the nucleic acids, cells containing the
< vector or antibodies directed against the polypeptides are useful for
< preparation of pharmaceuticals for prevention and/or treatment of viral
< diseases that are characterised by development of tumours or cell
< degeneration, specifically cancer but also Alzheimer's disease and
< schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
< patient samples is useful for diagnosis and/or prognosis of these
< diseases. The polypeptides can also be used to generate antibodies, and
< both the polypeptide and antibodies are useful as components of protein
< chips. The nucleic acid sequences of the invention can be used in gene
< therapy. This polynucleotide sequence represents a tumour suppression
< related human fukutin oligonucleotide of the invention
<
< Sequence 17 BP; 4 A; 7 C; 2 G; 4 T; 0 U; 0 Other;
<
< Query Match 15.3%; Score 11.2; DB 1; Length 17;
< Best Local Similarity 81.2%; Pred. No. 7.9e+02;
< Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 930 ATCCCTCCTTCATT 945
Db 2 ATCCACCACTGCATT 17

RESULT 286
ABT34837
ID ABT34837 standard; DNA; 17 BP.
XX
AC ABT34837;
XX
XX 12-JUN-2003 (first entry)
XX
XX Tumour suppression related human fukutin oligo SEQ ID No 474.
XX
XX Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrenia; protein chip; gene therapy; tumour suppression;
KW human fukutin; ds.
XX
OS Homo sapiens.
XX
XX WO2003025175-A2.
XX
XX 27-MAR-2003.
XX
XX 17-SEP-2002; 2002WO-IB004208.
XX
XX 17-SEP-2001; 2001PR-00011978.
XX
XX (MOLE-) MOLECULAR ENGINES LAB.
XX
XX Telerman A, Amson R, Tuijnder M;
XX
XX WPI; 2003-313353/30.
XX
XX New isolated nucleic acid, useful for treating viral diseases associated
PT with tumors and cell degeneration, also related polypeptides, antibodies
PT and transfected cells.
XX
XX Disclosure; Page 89; 720pp; French.
XX
XX The invention relates to a novel isolated 17 mer nucleic acid sequence.
CC given in the specification, a sequence containing at least 15 consecutive
CC nucleotides from the 17 mer sequence, a sequence with, after optimal
CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that
CC hybridizes to them under highly stringent conditions, or the complement
CC of any of them, or the corresponding RNA. The novel isolated nucleic
CC acids of the invention are useful as probes and primers for detecting,
CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
CC component of a gene chip, in vitro as (anti)sense reagents, and for
CC production of recombinant polypeptides. Any of the nucleic acids,
CC polypeptides, vectors containing the nucleic acids, cells containing the
CC vector or antibodies directed against the polypeptides are useful for
CC preparation of pharmaceuticals for prevention and/or treatment of viral
CC diseases that are characterised by development of tumours or cell
CC degeneration, specifically cancer but also Alzheimer's disease and
CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
CC patient samples is useful for diagnosis and/or prognosis of these
CC diseases. The polypeptides can also be used to generate antibodies, and
CC both the polypeptide and antibodies are useful as components of protein
CC chips. The nucleic acid sequences of the invention can be used in gene
CC therapy. This polynucleotide sequence represents a tumour suppression
CC related human fukutin oligonucleotide of the invention
XX
XX Sequence 17 BP; 3 A; 6 C; 3 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 15.3%; Score 11.2; DB 1; Length 17;
XX Best Local Similarity 81.2%; Pred. No. 7.9e+02;
XX Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 930 ATCCCTCCTTCATT 945
```



```

D>      ||| | |||| ||||
      2 ATACGCTCTGCATT 17

RESULT 287
ABT36373/c
ID   ABT36373 standard; DNA; 17 BP.
XX
XX
AC   ABT36373;
XX
DT   12-JUN-2003 (first entry)
XX
DE   Tumour suppression related human fukutin oligo SEQ ID No 2010.
XX
KW   Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
KW   antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
KW   schizophrenia; protein chip; gene therapy; tumour suppression;
KW   human fukutin; ds.
XX
OS   Homo sapiens.
XX
PN   WO2003025175-A2.
XX
PD   27-MAR-2003.
XX
PF   17-SEP-2002; 2002WO-IB004208.
XX
PR   17-SEP-2001; 2001FR-00011978.
XX
PA   (MOLE-) MOLECULAR ENGINES LAB.
XX
PI   Telerman A, Amson R, Tuijnder M;
XX
DR   WPI; 2003-313353/30.
XX
PT   New isolated nucleic acid, useful for treating viral diseases associated
PT   with tumors and cell degeneration, also related polypeptides, antibodies
PT   and transfected cells.
XX
PS   Disclosure; Page 269; 720pp; French.
XX
CC   The invention relates to a novel isolated 17 mer nucleic acid sequence,
CC   given in the specification, a sequence containing at least 15 consecutive
CC   nucleotides from the 17 mer sequence, a sequence with, after optimal
CC   alignment, at least 80 % identity to the 17 mer sequence, a sequence that
CC   hybridizes to them under highly stringent conditions, or the complement
CC   of any of them, or the corresponding RNA. The novel isolated nucleic
CC   acids of the invention are useful as probes and primers for detecting,
CC   identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
CC   component of a gene chip, in vitro as (anti)sense reagents, and for
CC   production of recombinant polypeptides. Any of the nucleic acids,
CC   polypeptides, vectors containing the nucleic acids, cells containing the
CC   vector or antibodies directed against the polypeptides are useful for
CC   preparation of pharmaceuticals for prevention and/or treatment of viral
CC   diseases that are characterised by development of tumours or cell
CC   degeneration, specifically cancer but also Alzheimer's disease and
CC   schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
CC   patient samples is useful for diagnosis and/or prognosis of these
CC   diseases. The polypeptides can also be used to generate antibodies, and
CC   both the polypeptide and antibodies are useful as components of protein
CC   chips. The nucleic acid sequences of the invention can be used in gene
CC   therapy. This polynucleotide sequence represents a tumour suppression
CC   related human fukutin oligonucleotide of the invention
XX
SQ   Sequence 17 BP; 6 A; 3 C; 2 G; 6 T; 0 U; 0 Other;
      Query Match      15.3%; Score 11.2; DB 1; Length 17;
      Best Local Similarity 81.2%; Pred. No. 7.9e+02;
      Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Cy   943 ATTGGTTTAATGATC 958
      ||||| ||||| |||||
Cb   16 ATTGGCTTAATAGATC 1

RESULT 288
ABT35884
ID   ABT35884 standard; DNA; 17 BP.
XX
XX
AC   ABT35884;
XX
DT   12-JUN-2003 (first entry)
XX
DE   Tumour suppression related human fukutin oligo SEQ ID No 1521.
XX
KW   Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
KW   antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
KW   schizophrenia; protein chip; gene therapy; tumour suppression;
KW   human fukutin; ds.
XX
OS   Homo sapiens.
XX
PN   WO2003025175-A2.
XX
PD   27-MAR-2003.
XX
PF   17-SEP-2002; 2002WO-IB004208.
XX
PR   17-SEP-2001; 2001FR-00011978.
XX
PA   (MOLE-) MOLECULAR ENGINES LAB.
XX
PI   Telerman A, Amson R, Tuijnder M;
XX
DR   WPI; 2003-313353/30.
XX
PT   New isolated nucleic acid, useful for treating viral diseases associated
PT   with tumors and cell degeneration, also related polypeptides, antibodies
PT   and transfected cells.
XX
PS   Disclosure; Page 210; 720pp; French.
XX
CC   The invention relates to a novel isolated 17 mer nucleic acid sequence,
CC   given in the specification, a sequence containing at least 15 consecutive
CC   nucleotides from the 17 mer sequence, a sequence with, after optimal
CC   alignment, at least 80 % identity to the 17 mer sequence, a sequence that
CC   hybridizes to them under highly stringent conditions, or the complement
CC   of any of them, or the corresponding RNA. The novel isolated nucleic
CC   acids of the invention are useful as probes and primers for detecting,
CC   identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
CC   component of a gene chip, in vitro as (anti)sense reagents, and for
CC   production of recombinant polypeptides. Any of the nucleic acids,
CC   polypeptides, vectors containing the nucleic acids, cells containing the
CC   vector or antibodies directed against the polypeptides are useful for
CC   preparation of pharmaceuticals for prevention and/or treatment of viral
CC   diseases that are characterised by development of tumours or cell
CC   degeneration, specifically cancer but also Alzheimer's disease and
CC   schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
CC   patient samples is useful for diagnosis and/or prognosis of these
CC   diseases. The polypeptides can also be used to generate antibodies, and
CC   both the polypeptide and antibodies are useful as components of protein
CC   chips. The nucleic acid sequences of the invention can be used in gene
CC   therapy. This polynucleotide sequence represents a tumour suppression
CC   related human fukutin oligonucleotide of the invention
XX
SQ   Sequence 17 BP; 3 A; 3 C; 2 G; 9 T; 0 U; 0 Other;
      Query Match      15.3%; Score 11.2; DB 1; Length 17;
      Best Local Similarity 81.2%; Pred. No. 7.9e+02;
      Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy   907 ATTTCCTTTGGCTTT 922
      ||||| ||||| |||||
Db   2 ATCTCTTAAGTCTTT 17
```

	ABT34478 standard; DNA; 17 BP.		
XX	ABT34478;		
XX	12-JUN-2003 (first entry)		
DE	Tumour suppression related human fukutin oligo SEQ ID No 115.		
XX	Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;		
KW	antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;		
KW	schizophrenia; protein chip; gene therapy; tumour suppression;		
XX	human fukutin; ds.		
OS	Homo sapiens.		
XX	WO2003025175-A2.		
PN	27-MAR-2003.		
XX	17-SEP-2002; 2002WO-IB004208.		
PF	17-SEP-2001; 2001FR-00011978.		
XX	(MOLE-) MOLECULAR ENGINES LAB.		
PA	Telerman A, Amson R, Tuijnder M;		
PI	WPI; 2003-313353/30.		
XX	New isolated nucleic acid, useful for treating viral diseases associated		
PT	with tumors and cell degeneration, also related polypeptides, antibodies		
PT	and transfected cells.		
XX	Disclosure; Page 47; 720pp; French.		
PS	The invention relates to a novel isolated 17 mer nucleic acid sequence,		
XX	given in the specification, a sequence containing at least 15 consecutive		
CC	nucleotides from the 17 mer sequence, a sequence with, after optimal		
CC	alignment, at least 80 % identity to the 17 mer sequence, a sequence that		
CC	hybridizes to them under highly stringent conditions, or the complement		
CC	of any of them, or the corresponding RNA. The novel isolated nucleic		
CC	acids of the invention are useful as probes and primers for detecting,		
CC	identifying, quantifying and/or amplifying a nucleic acid, e.g. as one		
CC	component of a gene chip, in vitro as (anti)sense reagents, and for		
CC	production of recombinant polypeptides. Any of the nucleic acids,		
CC	polypeptides, vectors containing the nucleic acids, cells containing the		
CC	vector or antibodies directed against the polypeptides are useful for		
CC	preparation of pharmaceuticals for prevention and/or treatment of viral		
CC	diseases that are characterised by development of tumours or cell		
CC	degeneration, specifically cancer but also Alzheimer's disease and		
CC	schizophrenia. Analysis of the expression of the 17 mer nucleic acids in		
CC	patient samples is useful for diagnosis and/or prognosis of these		
CC	diseases. The polypeptides can also be used to generate antibodies, and		
CC	both the polypeptide and antibodies are useful as components of protein		
CC	chips. The nucleic acid sequences of the invention can be used in gene		
CC	therapy. This polynucleotide sequence represents a tumour suppression		
CC	related human fukutin oligonucleotide of the invention		
XX	Sequence 17 BP; 6 A; 4 C; 2 G; 5 T; 0 U; 0 Other;		
SQ	Query Match 15.3%; Score 11.2; DB 1; Length 17;		
	Best Local Similarity 81.2%; Pred. No. 7.9e+02;		
	Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;		
QY	943 ATTGGTTTAATGATC 958		
Dd	16 ACTGGATTAAATGCATC 1		
RESULT 291			
ABT38298			
ID	ABT38298 standard; DNA; 17 BP.		
XX			

AC ABT38298;
 XX
 DT 12-JUN-2003 (first entry)
 XX
 DE Tumour suppression related human fukutin oligo SEQ ID No 3935.
 XX
 CE Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
 KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
 KW schizophrenia; protein chip; gene therapy; tumour suppression;
 KW human fukutin; ds.
 XX
 OS Homo sapiens.
 CS WO2003025175-A2.
 SN 27-MAR-2003.
 XX
 ED 17-SEP-2002; 2002WO-IB004208.
 XX
 PF 17-SEP-2001; 2001FR-00011978.
 XX
 PR (MOLE-) MOLECULAR ENGINES LAB.
 PA Telerman A, Amson R, Tuijnder M;
 XX WPI; 2003-313353/30.
 XX
 DR New isolated nucleic acid, useful for treating viral diseases associated
 XX with tumors and cell degeneration, also related polypeptides, antibodies
 PT and transfected cells.
 PT
 XX Disclosure; Page 494; 720pp; French.
 XX
 CC The invention relates to a novel isolated 17 mer nucleic acid sequence,
 CC given in the specification, a sequence containing at least 15 consecutive
 CC nucleotides from the 17 mer sequence, a sequence with, after optimal
 CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that
 CC hybridizes to them under highly stringent conditions, or the complement
 CC of any of them, or the corresponding RNA. The novel isolated nucleic
 CC acids of the invention are useful as probes and primers for detecting,
 CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
 CC component of a gene chip, in vitro as (anti)sense reagents, and for
 CC production of recombinant polypeptides. Any of the nucleic acids,
 CC polypeptides, vectors containing the nucleic acids, cells containing the
 CC vector or antibodies directed against the nucleic acids, cells containing the
 CC preparation of pharmaceuticals for prevention and/or treatment of viral
 CC diseases that are characterised by development of tumours or cell
 CC degeneration, specifically cancer but also Alzheimer's disease and
 CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
 CC patient samples is useful for diagnosis and/or prognosis of these
 CC diseases. The polypeptides can also be used to generate antibodies, and
 CC both the polypeptide and antibodies are useful as components of protein
 CC chips. The nucleic acid sequences of the invention can be used in gene
 CC therapy. This polynucleotide sequence represents a tumour suppression
 CC related human fukutin oligonucleotide of the invention
 XX
 SQ Sequence 17 BP; 2 A; 1 C; 4 G; 10 T; 0 U; 0 Other;
 Query Match 15.3%; Score 11.2; DB 1; Length 17;
 Best Local Similarity 81.2%; Pred. No. 7.9e+02;
 Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 903 GGTCATTTCTTTGGT 918
 | ||||| |||||
 Db 1 GATCATTGTGTTGTT 16
 RESULT 292
 ABT40206
 ID ABT40206 standard; DNA; 17 BP.
 XX
 AC ABT40206;
 XX

DT 13-JUN-2003 (first entry)
 XX
 DE Tumour suppression related human fukutin oligo SEQ ID No 5843.
 XX
 KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
 KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
 KW schizophrenia; protein chip; gene therapy; tumour suppression;
 KW human fukutin; ds.
 XX
 OS Homo sapiens.
 CS WO2003025175-A2.
 SN 27-MAR-2003.
 XX
 ED 17-SEP-2002; 2002WO-IB004208.
 XX
 PF 17-SEP-2001; 2001FR-00011978.
 XX
 PR (MOLE-) MOLECULAR ENGINES LAB.
 PA Telerman A, Amson R, Tuijnder M;
 XX WPI; 2003-313353/30.
 XX
 DR New isolated nucleic acid, useful for treating viral diseases associated
 XX with tumors and cell degeneration, also related polypeptides, antibodies
 PT and transfected cells.
 PT
 XX Disclosure; Page 717; 720pp; French.
 XX
 CC The invention relates to a novel isolated 17 mer nucleic acid sequence,
 CC given in the specification, a sequence containing at least 15 consecutive
 CC nucleotides from the 17 mer sequence, a sequence with, after optimal
 CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that
 CC hybridizes to them under highly stringent conditions, or the complement
 CC of any of them, or the corresponding RNA. The novel isolated nucleic
 CC acids of the invention are useful as probes and primers for detecting,
 CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
 CC component of a gene chip, in vitro as (anti)sense reagents, and for
 CC production of recombinant polypeptides. Any of the nucleic acids,
 CC polypeptides, vectors containing the nucleic acids, cells containing the
 CC vector or antibodies directed against the polypeptides are useful for
 CC preparation of pharmaceuticals for prevention and/or treatment of viral
 CC diseases that are characterised by development of tumours or cell
 CC degeneration, specifically cancer but also Alzheimer's disease and
 CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
 CC patient samples is useful for diagnosis and/or prognosis of these
 CC diseases. The polypeptides can also be used to generate antibodies, and
 CC both the polypeptide and antibodies are useful as components of protein
 CC chips. The nucleic acid sequences of the invention can be used in gene
 CC therapy. This polynucleotide sequence represents a tumour suppression
 CC related human fukutin oligonucleotide of the invention
 XX
 SQ Sequence 17 BP; 1 A; 2 C; 3 G; 11 T; 0 U; 0 Other;
 Query Match 15.3%; Score 11.2; DB 1; Length 17;
 Best Local Similarity 81.2%; Pred. No. 7.9e+02;
 Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 916 GGCTTTTGCCTTTTAT 931
 | ||||| |||||
 Db 1 GATCTTTGCTTTTGT 16
 RESULT 293
 ABT39920
 ID ABT39920 standard; DNA; 17 BP.
 XX
 AC ABT39920;
 XX
 DT 13-JUN-2003 (first entry)
 XX

Tumour suppression related human fukutin oligo SEQ ID No 5557.

Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; protein chip; gene therapy; tumour suppression; human fukutin; ds.

Homo sapiens.

WO2003025175-A2.

27-MAR-2003.

17-SEP-2002; 2002WO-IB004208.

17-SEP-2001; 2001FR-00011978.

(MOLE-) MOLECULAR ENGINES LAB.

Telerman A, Amson R, Tuijnder M;

WPI; 2003-313353/30.

New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.

Disclosure; Page 683; 720pp; French.

The invention relates to a novel isolated 17 mer nucleic acid sequence, given in the specification, a sequence containing at least 15 consecutive nucleotides from the 17 mer sequence, a sequence with, after optimal alignment, at least 80 % identity to the 17 mer sequence, a sequence that hybridizes to them under highly stringent conditions, or the complement of any of them, or the corresponding RNA. The novel isolated nucleic acids of the invention are useful as probes and primers for detecting, identifying, quantifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as (anti)sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, polypeptides, vectors containing the nucleic acids, cells containing the vector or antibodies directed against the polypeptides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia. Analysis of the expression of the 17 mer nucleic acids in patient samples is useful for diagnosis and/or prognosis of these diseases. The polypeptides can also be used to generate antibodies, and both the polypeptide and antibodies are useful as components of protein chips. The nucleic acid sequences of the invention can be used in gene therapy. This polynucleotide sequence represents a tumour suppression related human fukutin oligonucleotide of the invention

Sequence 17 BP; 2 A; 4 C; 2 G; 9 T; 0 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;
Best Local Similarity 81.2%; Pred. No. 7.9e+02;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

930 ATCCCTCTCTTCATT 945
|||||
2 ATCCCTCTCTTCATT 17

RESULT 294
ADA99961/c
ADA99961 standard; DNA; 17 BP.
ADA99961;

20-NOV-2003 (first entry)

Human MDZ3 scanning oligonucleotide SEQ ID 950.

KW Cytostatic; immunostimulant; gene therapy; vaccine; human;
KW zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;
KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
KW developmental disorder; ss.
XX
XX Homo sapiens.
XX
XX EP1281758-A2.
XX
XX 05-FEB-2003.
XX
XX 30-JUL-2002; 2002EP-00016874.
XX
XX 02-AUG-2001; 2001US-00922181.
XX
XX (AEOM-) AEOMICA INC.
XX
XX Shannon M, Gu Y, Nguyen C;
XX
XX WPI; 2003-423107/40.
XX
XX New zinc finger-containing proteins and nucleic acids, useful in
PT manufacturing a medicament for treating or preventing a disorder
PT associated with decreased or increased expression or activity of MDZ3,
PT MDZ4, MDZ7 or MDZ12, e.g. cancer.
XX
XX Example 8; SEQ ID NO 950; 103pp; English.
XX
XX The present invention relates to novel human zinc finger-containing
CC proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is
CC encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2,
CC MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome
CC 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,
CC or in manufacturing a medicament for treating or preventing a disorder
CC associated with decreased or increased expression or activity of MDZ3,
CC MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic
CC acids and proteins are also useful for diagnosing or monitoring a disease
CC caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic
CC acids can also be used as probes to detect and characterize gross
CC alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are
CC useful in constructing microarrays for measuring gene expression. The
CC proteins are useful as therapeutic agents for gene therapy or as
CC vaccines. The present sequence was used to illustrate the invention.
XX
SQ Sequence 17 BP; 9 A; 2 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;
Best Local Similarity 81.2%; Pred. No. 7.9e+02;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 931 TCCCTCTCTTCATTG 946
|||||
Db 16 TCCCTCTCTTCATTG 1

RESULT 295
ADA99958/c
ID ADA99958 standard; DNA; 17 BP.
XX
XX ADA99958;
AC
XX
XX 20-NOV-2003 (first entry)
XX
XX Human MDZ3 scanning oligonucleotide SEQ ID 947.
XX
KW Cytostatic; immunostimulant; gene therapy; vaccine; human;
KW zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;
KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
KW developmental disorder; ss.
XX
XX Homo sapiens.
XX
XX EP1281758-A2.

```
XX 05-FEB-2003.
ED
XX
XX 30-JUL-2002; 2002EP-00016874.
XX
XX 02-AUG-2001; 2001US-00922181.
XX
XX (AEOM-) AEOMICA INC.
XX
XX Shannon M, Gu Y, Nguyen C;
XX WPI; 2003-423107/40.
XX
XX New zinc finger-containing proteins and nucleic acids, useful in
XX manufacturing a medicament for treating or preventing a disorder
XX associated with decreased or increased expression or activity of MDZ3,
XX MDZ4, MDZ7 or MDZ12, e.g. cancer.
XX
XX Example 8; SEQ ID NO 947; 103pp; English.
XX
XX The present invention relates to novel human zinc finger-containing
XX proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is
XX encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2,
XX MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome
XX 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,
XX or in manufacturing a medicament for treating or preventing a disorder
XX associated with decreased or increased expression or activity of MDZ3,
XX MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic
XX acids and proteins are also useful for diagnosing or monitoring a disease
XX caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic
XX acids can also be used as probes to detect and characterize gross
XX alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are
XX useful in constructing microarrays for measuring gene expression. The
XX proteins are useful as therapeutic agents for gene therapy or as
XX vaccines. The present sequence was used to illustrate the invention.
XX
XX Sequence 17 BP; 8 A; 1 C; 8 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 15.3%; Score 11.2; DB 1; Length 17;
XX Best Local Similarity 81.2%; Pred. No. 7.9e+02;
XX Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 933 CCTCCTCTTCATTGGT 948
XX ||||| ||||| |||||
XX 17 CCTCCTCTTCATTGCT 2
XX
XX RESULT 296
XX ADA99960/c
XX AD A99960 standard; DNA; 17 BP.
XX
XX ADA99960;
XX
XX 20-NOV-2003 (first entry)
XX
XX Human MDZ3 scanning oligonucleotide SEQ ID 949.
XX
XX Cytostatic; immunostimulant; gene therapy; vaccine; human;
XX zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;
XX chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
XX developmental disorder; ss.
XX
XX Homo sapiens.
XX
XX EP1281758-A2.
XX
XX 05-FEB-2003.
XX
XX 30-JUL-2002; 2002EP-00016874.
XX
XX 02-AUG-2001; 2001US-00922181.
XX
XX (AEOM-) AEOMICA INC.
```

```
XX Shannon M, Gu Y, Nguyen C;
XX WPI; 2003-423107/40.
XX
XX New zinc finger-containing proteins and nucleic acids, useful in
XX manufacturing a medicament for treating or preventing a disorder
XX associated with decreased or increased expression or activity of MDZ3,
XX MDZ4, MDZ7 or MDZ12, e.g. cancer.
XX
XX Example 8; SEQ ID NO 949; 103pp; English.
XX
XX The present invention relates to novel human zinc finger-containing
XX proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is
XX encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2,
XX MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome
XX 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,
XX or in manufacturing a medicament for treating or preventing a disorder
XX associated with decreased or increased expression or activity of MDZ3,
XX MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic
XX acids and proteins are also useful for diagnosing or monitoring a disease
XX caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic
XX acids can also be used as probes to detect and characterize gross
XX alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are
XX useful in constructing microarrays for measuring gene expression. The
XX proteins are useful as therapeutic agents for gene therapy or as
XX vaccines. The present sequence was used to illustrate the invention.
XX
XX Sequence 17 BP; 8 A; 2 C; 7 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 15.3%; Score 11.2; DB 1; Length 17;
XX Best Local Similarity 81.2%; Pred. No. 7.9e+02;
XX Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 931 TCCCTCCTCTTCATTG 946
XX ||||| ||||| |||||
XX 17 TGCTCCTCTTCCTTG 2
XX
XX RESULT 297
XX ADB00252/c
XX ID ADB00252 standard; DNA; 17 BP.
XX
XX ADB00252;
XX
XX 20-NOV-2003 (first entry)
XX
XX Human MDZ3 scanning oligonucleotide SEQ ID 1238.
XX
XX Cytostatic; immunostimulant; gene therapy; vaccine; human;
XX zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;
XX chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
XX developmental disorder; ss.
XX
XX Homo sapiens.
XX
XX EP1281758-A2.
XX
XX 05-FEB-2003.
XX
XX 30-JUL-2002; 2002EP-00016874.
XX
XX 02-AUG-2001; 2001US-00922181.
XX
XX (AEOM-) AEOMICA INC.
XX
XX Shannon M, Gu Y, Nguyen C;
XX WPI; 2003-423107/40.
XX
XX New zinc finger-containing proteins and nucleic acids, useful in
XX manufacturing a medicament for treating or preventing a disorder
XX associated with decreased or increased expression or activity of MDZ3,
XX associated with decreased or increased expression or activity of MDZ3,
XX MDZ4, MDZ7 or MDZ12, e.g. cancer.
```

MDZ4, MDZ7 or MDZ12, e.g. cancer.

Example 8; SEQ ID NO 1238; 103pp; English.

The present invention relates to novel human zinc finger-containing proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2, MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy, or in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3, MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic acids and proteins are also useful for diagnosing or monitoring a disease caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic acids can also be used as probes to detect and characterize gross alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are useful in constructing microarrays for measuring gene expression. The proteins are useful as therapeutic agents for gene therapy or as vaccines. The present sequence was used to illustrate the invention.

Sequence 17 BP; 8 A; 4 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;

Best Local Similarity 81.2%; Pred. No. 7.9e+02;

Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

934 CTCCTCTTCATGGTT 949

|||||
16 CTCCTCTTCGTTGTT 1

RESULT 298

ADB02204/C

ADB02204 standard; DNA; 17 BP.

ADB02204;

20-NOV-2003 (first entry)

Human MDZ4 scanning oligonucleotide SEQ ID 3190.

Cytostatic; immunostimulant; gene therapy; vaccine; human;

zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;

chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;

developmental disorder; ss.

Homo sapiens.

EP1281758-A2.

05-FEB-2003.

30-JUL-2002; 2002EP-00016874.

02-AUG-2001; 2001US-00922181.

(AEOM-) AEOMICA INC.

Shannon M, Gu Y, Nguyen C;

WPI; 2003-423107/40.

New zinc finger-containing proteins and nucleic acids, useful in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3, MDZ4, MDZ7 or MDZ12, e.g. Cancer.

Example 8; SEQ ID NO 3190; 103pp; English.

The present invention relates to novel human zinc finger-containing proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2, MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome

15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy, or in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3, MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic acids and proteins are also useful for diagnosing or monitoring a disease caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic acids can also be used as probes to detect and characterize gross alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are useful in constructing microarrays for measuring gene expression. The proteins are useful as therapeutic agents for gene therapy or as vaccines. The present sequence was used to illustrate the invention.

Sequence 17 BP; 8 A; 1 C; 8 G; 0 T; 0 U; 0 Other;

Query Match

15.3%; Score 11.2; DB 1; Length 17;

Best Local Similarity 81.2%; Pred. No. 7.9e+02;

Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 929 TATCCCTCTCTTCAT 944

|||||
17 TGTCTCTCTCTCTCT 2

RESULT 299

ADB00251/C

ADB00251 standard; DNA; 17 BP.

AC ADB00251;

XX

20-NOV-2003 (first entry)

XX

Human MDZ3 scanning oligonucleotide SEQ ID 1237.

XX

Cytostatic; immunostimulant; gene therapy; vaccine; human;

zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;

chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;

developmental disorder; ss.

XX Homo sapiens.

XX EP1281758-A2.

XX 05-FEB-2003.

XX 30-JUL-2002; 2002EP-00016874.

XX 02-AUG-2001; 2001US-00922181.

XX (AEOM-) AEOMICA INC.

XX Shannon M, Gu Y, Nguyen C;

XX WPI; 2003-423107/40.

XX

New zinc finger-containing proteins and nucleic acids, useful in

manufacturing a medicament for treating or preventing a disorder

associated with decreased or increased expression or activity of MDZ3,

MDZ4, MDZ7 or MDZ12, e.g. cancer.

Example 8; SEQ ID NO 1237; 103pp; English.

The present invention relates to novel human zinc finger-containing proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2, MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy, or in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3, MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic acids and proteins are also useful for diagnosing or monitoring a disease caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic acids can also be used as probes to detect and characterize gross alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are

CC useful in constructing microarrays for measuring gene expression. The
CC proteins are useful as therapeutic agents for gene therapy or as
CC vaccines. The present sequence was used to illustrate the invention.
XX
SQ Sequence 17 BP; 8 A; 4 C; 5 G; 0 T; 0 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;
Best Local Similarity 81.2%; Pred. No. 7.9e+02;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 934 CTCCTCTTCATTCGTT 949
DB 17 CTTCCTTCGTCGTT 2

RESULT 300
ID ADB02205/c
XX ADB02205 standard; DNA; 17 BP.
AC ADB02205;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human MD24 scanning oligonucleotide SEQ ID 3191.
XX
KW Cytostatic; immunostimulant; gene therapy; vaccine; human;
KW zinc finger protein; MD23; MD24; MD27; MDZ12; chromosome 7q22.1;
KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
KW developmental disorder; ss.
XX
OS Homo sapiens.
XX
PN EPI281758-A2.
XX
PD 05-FEB-2003.
XX
PF 30-JUL-2002; 2002EP-00016874.
XX
PR 02-AUG-2001; 2001US-00922181.
XX
PA (AEOM-) ABOMICA INC.
XX
PI Shannon M, Gu Y, Nguyen C;
XX
WPI; 2003-423107/40.
XX
PT New zinc finger-containing proteins and nucleic acids, useful in
PT manufacturing a medicament for treating or preventing a disorder
PT associated with decreased or increased expression or activity of MD23,
PT MD24, MD27 or MDZ12, e.g. cancer.
XX
PS Example 8; SEQ ID NO 3191; 103pp; English.
XX
CC The present invention relates to novel human zinc finger-containing
CC proteins and their coding sequences: MD23, MD24, MD27, MDZ12. MD23 is
CC encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2,
CC MD27 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome
CC 15q26.1. The MD23, MD24, MD27, and MDZ12 sequences are useful in therapy,
CC or in manufacturing a medicament for treating or preventing a disorder
CC associated with decreased or increased expression or activity of MD23,
CC MD24, MD27, or MDZ12, e.g. cancer or developmental disorders. The nucleic
CC acids and proteins are also useful for diagnosing or monitoring a disease
CC caused by altered expression of MD23, MD24, MD27, or MDZ12. The nucleic
CC acids can also be used as probes to detect and characterize gross
CC alterations in MD23, MD24, MD27, or MDZ12 genetic locus. The probes are
CC useful in constructing microarrays for measuring gene expression. The
CC proteins are useful as therapeutic agents for gene therapy or as
CC vaccines. The present sequence was used to illustrate the invention.
XX
SQ Sequence 17 BP; 8 A; 1 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;
Best Local Similarity 81.2%; Pred. No. 7.9e+02;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 934 CTCCTCTTCATTCGTT 949
DB 17 CTTCCTTCGTCGTT 2

RESULT 302
ID ADB02205/c
XX ADB02205 standard; DNA; 17 BP.
AC ADB02205;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human MD23 scanning oligonucleotide SEQ ID 948.
XX
KW Cytostatic; immunostimulant; gene therapy; vaccine; human;
KW zinc finger protein; MD23; MD24; MD27; MDZ12; chromosome 7q22.1;
KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
KW developmental disorder; ss.
XX
OS Homo sapiens.
XX
PN EPI281758-A2.
XX
PD 05-FEB-2003.
XX
PF 30-JUL-2002; 2002EP-00016874.
XX
PR 02-AUG-2001; 2001US-00922181.
XX
PA (AEOM-) ABOMICA INC.
XX
PI Shannon M, Gu Y, Nguyen C;
XX
WPI; 2003-423107/40.
XX
PT New zinc finger-containing proteins and nucleic acids, useful in
PT manufacturing a medicament for treating or preventing a disorder
PT associated with decreased or increased expression or activity of MD23,
PT MD24, MD27 or MDZ12, e.g. cancer.
XX
PS Example 8; SEQ ID NO 948; 103pp; English.
XX
CC The present invention relates to novel human zinc finger-containing
CC proteins and their coding sequences: MD23, MD24, MD27, MDZ12. MD23 is
CC encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2,
CC MD27 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome
CC 15q26.1. The MD23, MD24, MD27, and MDZ12 sequences are useful in therapy,
CC or in manufacturing a medicament for treating or preventing a disorder
CC associated with decreased or increased expression or activity of MD23,
CC MD24, MD27, or MDZ12, e.g. cancer or developmental disorders. The nucleic
CC acids and proteins are also useful for diagnosing or monitoring a disease
CC caused by altered expression of MD23, MD24, MD27, or MDZ12. The nucleic
CC acids can also be used as probes to detect and characterize gross
CC alterations in MD23, MD24, MD27, or MDZ12 genetic locus. The probes are
CC useful in constructing microarrays for measuring gene expression. The
CC proteins are useful as therapeutic agents for gene therapy or as
CC vaccines. The present sequence was used to illustrate the invention.
XX
SQ Sequence 17 BP; 8 A; 1 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;
Best Local Similarity 81.2%; Pred. No. 7.9e+02;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 933 CCTCTCTTCATTCGTT 948
DB 16 CCTCTCTTCCTTCCT 1

Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 929 TATCCCTCTCTTCAT 944
DB 16 TGTCTCTCTCTTCCT 1

RESULT 301
ID ADA99959/c
XX ADA99959 standard; DNA; 17 BP.
AC ADA99959;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human MD23 scanning oligonucleotide SEQ ID 948.
XX
KW Cytostatic; immunostimulant; gene therapy; vaccine; human;
KW zinc finger protein; MD23; MD24; MD27; MDZ12; chromosome 7q22.1;
KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
KW developmental disorder; ss.
XX
OS Homo sapiens.
XX
PN EPI281758-A2.
XX
PD 05-FEB-2003.
XX
PF 30-JUL-2002; 2002EP-00016874.
XX
PR 02-AUG-2001; 2001US-00922181.
XX
PA (AEOM-) ABOMICA INC.
XX
PI Shannon M, Gu Y, Nguyen C;
XX
WPI; 2003-423107/40.
XX
PT New zinc finger-containing proteins and nucleic acids, useful in
PT manufacturing a medicament for treating or preventing a disorder
PT associated with decreased or increased expression or activity of MD23,
PT MD24, MD27 or MDZ12, e.g. cancer.
XX
PS Example 8; SEQ ID NO 948; 103pp; English.
XX
CC The present invention relates to novel human zinc finger-containing
CC proteins and their coding sequences: MD23, MD24, MD27, MDZ12. MD23 is
CC encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2,
CC MD27 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome
CC 15q26.1. The MD23, MD24, MD27, and MDZ12 sequences are useful in therapy,
CC or in manufacturing a medicament for treating or preventing a disorder
CC associated with decreased or increased expression or activity of MD23,
CC MD24, MD27, or MDZ12, e.g. cancer or developmental disorders. The nucleic
CC acids and proteins are also useful for diagnosing or monitoring a disease
CC caused by altered expression of MD23, MD24, MD27, or MDZ12. The nucleic
CC acids can also be used as probes to detect and characterize gross
CC alterations in MD23, MD24, MD27, or MDZ12 genetic locus. The probes are
CC useful in constructing microarrays for measuring gene expression. The
CC proteins are useful as therapeutic agents for gene therapy or as
CC vaccines. The present sequence was used to illustrate the invention.
XX
SQ Sequence 17 BP; 8 A; 2 C; 7 G; 0 T; 0 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;
Best Local Similarity 81.2%; Pred. No. 7.9e+02;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 933 CCTCTCTTCATTCGTT 948
DB 16 CCTCTCTTCCTTCCT 1

RESULT 302

```

KW 60343/c
KW ABZ60343 standard; RNA; 17 BP.
KW ABZ60343;
KW 21-MAR-2003 (first entry)
KW Human K-Ras DNazyme substrate #455.
KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytosstatic; anti-HIV;
KW anti-rheumatic; cancer; AIDS; ss.
KW Homo sapiens.
KW WO200297114-A2.
KW 05-DEC-2002.
KW 29-MAY-2002; 2002WO-US016840.
KW 29-MAY-2001; 2001US-0294140P.
KW 06-JUN-2001; 2001US-0296249P.
KW 10-SEP-2001; 2001US-0318471P.
KW (RIBO-) RIBOZYME PHARM INC.
KW Mcswiggen J;
KW WPI; 2003-140484/13.
KW Novel short interfering RNA and enzymatic nucleic acid useful for
KW treating cancer, modulates the expression of a nucleic acid encoding
KW HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
KW Claim 58; Page 93; 185pp; English.
KW The invention relates to a novel short interfering RNA (siRNA) nucleic
KW acid molecule or an enzymatic nucleic acid molecule, that modulates
KW expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
KW human immunodeficiency virus (HIV) or a component of HIV. The nucleic
KW acid molecule of the invention has cytosstatic, anti-HIV, and anti-
KW rheumatic activity. The nucleic acid molecules are useful for reducing
KW HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
KW also useful for treating breast, ovarian, colorectal, lung, prostate,
KW bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
KW shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
KW ABZ66530 - ABZ66585 represent substrate/target sequences for the human
KW ribozymes of the invention
KW Sequence 17 BP; 8 A; 1 C; 3 G; 0 T; 5 U; 0 Other;
KW Query Match 15.3%; Score 11.2; DB 1; Length 17;
KW Best Local Similarity 81.2%; Pred. No. 7.9e+02;
KW Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
KW 937 CTCCTTCATTGGTTTAA 952
KW 16 CACTTCATTGTTTAA 1
KW
KW SULT 303
KW D57473
KW ACD57473 standard; RNA; 17 BP.
KW ACD57473;
KW 23-SEP-2003 (first entry)
KW HCV DNazyme substrate sequence #339.
KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW RNA stability; RNA expression; RNA synthesis; antisense;

```

```

KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;
KW amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW HBV reverse transcriptase; Enhancer I region; viral replication;
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW virucide; antiinflammatory; substrate; ss.
KW XX Hepatitis C virus.
KW OS
KW XX WO200281494-A1.
KW PN
KW XX 17-OCT-2002.
KW PD
KW XX
KW XX 26-MAR-2002; 2002WO-US009187.
KW PF
KW XX 26-MAR-2001; 2001US-00817879.
KW PR
KW 08-JUN-2001; 2001US-00877478.
KW PR
KW 08-JUN-2001; 2001US-0296876P.
KW PR
KW 24-OCT-2001; 2001US-0335059P.
KW PR
KW 05-DEC-2001; 2001US-0337055P.
KW PR
KW XX (RIBO-) RIBOZYME PHARM INC.
KW PA (BLAT/) BLATT L.
KW PA (MACE/) MACEJAK D.
KW PA (MCSW/) MCSWIGGEN J.
KW PA (MORR/) MORRISSEY D.
KW PA (PASC/) PAVCO P.
KW PA (LEBP/) LEE P.
KW PA (DRAP/) DRAPER K.
KW PA (ROBE/) ROBERTS E.
KW XX
KW PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
KW PI Draper K, Roberts E;
KW XX
KW DR WPI; 2003-229207/22.
KW XX
KW PT Novel compound useful for treating cirrhosis, liver failure,
KW PT hepatocellular carcinoma, or condition associated with hepatitis C virus
KW PT infection.
KW XX Claim 1; Page 240; 387pp; English.
KW PS The present invention relates to nucleic acid molecules which modulate
KW CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
KW CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
KW CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
KW CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
KW CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
KW CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
KW CC as oligonucleotides that specifically bind the Enhancer I region of HBV
KW CC DNA. The nucleic acids may be used to modulate the expression of HBV
KW CC genes and HBV viral replication. Also disclosed is a method for screening
KW CC compounds and/or potential therapies directed against HBV, and compounds
KW CC that modulate the expression and/or replication of HCV. The compounds and
KW CC methods of the invention are useful for the treatment of degenerative and
KW CC disease states related to HBV and HCV infection, replication and gene
KW CC expression such as cirrhosis, liver failure, and hepatocellular
KW CC carcinoma. The present sequence represents a substrate for one of the HCV
KW CC DNazyme or minus strand DNazyme sequences disclosed in the present
KW CC invention
KW XX
KW SQ Sequence 17 BP; 2 A; 5 C; 4 G; 0 T; 6 U; 0 Other;
KW Query Match 15.3%; Score 11.2; DB 1; Length 17;
KW Best Local Similarity 43.8%; Pred. No. 7.9e+02;
KW Matches 7; Conservative 6; Mismatches 3; Indels 0; Gaps 0;

```

Qy 916 GGTCTTTGCTTTTAT 931

Db 2 GGGCCUCCUUAU 17

RESULT 304

PA (ROBE/) ROBERTS E.
 XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
 PI Draper K, Roberts E;
 XX WPI; 2003-229207/22.
 XX Novel compound useful for treating cirrhosis, liver failure,
 PT hepatocellular carcinoma, or condition associated with hepatitis C virus
 PT infection.
 XX Example 1; Page 152; 387pp; English.
 XX The present invention relates to nucleic acid molecules which modulate
 CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
 CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
 CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
 CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
 CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
 CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
 CC as oligonucleotides that specifically bind the Enhancer I region of HBV
 CC DNA. The nucleic acids may be used to modulate the expression of HBV
 CC genes and HBV viral replication. Also disclosed is a method for screening
 CC compounds and/or potential therapies directed against HBV, and compounds
 CC that modulate the expression and/or replication of HCV. The compounds and
 CC methods of the invention are useful for the treatment of degenerative and
 CC disease states related to HBV and HCV infection, replication and gene
 CC expression such as cirrhosis, liver failure, and hepatocellular
 CC carcinoma. The present sequence represents a substrate for one of the HBV
 CC ribozyme, inozyme, G-cleaver, zinzyme, DNazyme or amberyzyme sequences
 CC disclosed in the present invention
 XX Sequence 17 BP; 2 A; 5 C; 2 G; 0 T; 8 U; 0 Other;
 SQ
 Query Match 15.3%; Score 11.2; DB 1; Length 17;
 Best Local Similarity 37.5%; Pred. No. 7.9e+02;
 Matches 6; Conservative 7; Mismatches 3; Indels 0; Gaps 0;
 QY 929 TATCCCTCTCTTCAT 944
 :|:|:|:|:|:|:
 CB 1 UAUGCCUACUACUUGU 16
 RESULT 308
 ACB64075
 ID ACD64075 standard; RNA; 17 BP.
 AC ACD64075;
 DT 30-SEP-2003 (first entry)
 DE HCV minus strand DNazyme substrate sequence #1378.
 XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
 KW RNA stability; RNA expression; RNA synthesis; antisense;
 KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;
 KW amberyzyme; G-cleaver ribozyme; decoy molecule; aptamer;
 KW HBV reverse transcriptase; Enhancer I region; viral replication;
 KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
 KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
 KW virucide; antiinflammatory; substrate; ss.
 XX Hepatitis C virus.
 CS WO200281494-A1.
 XX 17-OCT-2002.
 XX 26-MAR-2002; 2002WO-US009187.
 XX 26-MAR-2001; 2001US-00817879.
 PR 08-JUN-2001; 2001US-00877478.
 PR 08-JUN-2001; 2001US-0296876P.

PR 24-OCT-2001; 2001US-0335059P.
 XX 05-DEC-2001; 2001US-0337055P.
 PA (RIBO-) RIBOZYME PHARM INC.
 PA (BLAT/) BLATT L.
 PA (MACE/) MACEJAK D.
 PA (MCSW/) MCSWIGGEN J.
 PA (MORR/) MORRISSEY D.
 PA (PAVC/) PAVCO P.
 PA (LEEE/) LEE P.
 PA (DRAP/) DRAPER K.
 PA (ROBE/) ROBERTS E.
 XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
 PI Draper K, Roberts E;
 XX WPI; 2003-229207/22.
 XX Novel compound useful for treating cirrhosis, liver failure,
 PT hepatocellular carcinoma, or condition associated with hepatitis C virus
 PT infection.
 XX Claim 1; Page 299; 387pp; English.
 XX The present invention relates to nucleic acid molecules which modulate
 CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
 CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
 CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
 CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
 CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
 CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
 CC as oligonucleotides that specifically bind the Enhancer I region of HBV
 CC DNA. The nucleic acids may be used to modulate the expression of HBV
 CC genes and HBV viral replication. Also disclosed is a method for screening
 CC compounds and/or potential therapies directed against HBV, and compounds
 CC that modulate the expression and/or replication of HCV. The compounds and
 CC methods of the invention are useful for the treatment of degenerative and
 CC disease states related to HBV and HCV infection, replication and gene
 CC expression such as cirrhosis, liver failure, and hepatocellular
 CC carcinoma. The present sequence represents a substrate for one of the HCV
 CC DNazyme or minus strand DNazyme sequences disclosed in the present
 CC invention
 XX Sequence 17 BP; 2 A; 4 C; 5 G; 0 T; 6 U; 0 Other;
 SQ
 Query Match 15.3%; Score 11.2; DB 1; Length 17;
 Best Local Similarity 43.8%; Pred. No. 7.9e+02;
 Matches 7; Conservative 6; Mismatches 3; Indels 0; Gaps 0;
 QY 933 CCTCCTCTTCATTGGT 948
 :|:|:|:|:|:|:
 Db 1 CCUGGUCUACUACUUGU 16
 RESULT 309
 ACD57814/c
 ID ACD57814 standard; RNA; 17 BP.
 XX ACD57814;
 AC ACD57814;
 XX 23-SEP-2003 (first entry)
 XX HCV DNazyme substrate sequence #512.
 XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
 KW RNA stability; RNA expression; RNA synthesis; antisense;
 KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;
 KW amberyzyme; G-cleaver ribozyme; decoy molecule; aptamer;
 KW HBV reverse transcriptase; Enhancer I region; viral replication;
 KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
 KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
 KW virucide; antiinflammatory; substrate; ss.

Hepatitis C virus.
WO200281494-A1.
17-OCT-2002.
26-MAR-2002; 2002WO-US009187.
26-MAR-2001; 2001US-00817879.
08-JUN-2001; 2001US-00877478.
08-JUN-2001; 2001US-0296876P.
24-OCT-2001; 2001US-0335059P.
05-DEC-2001; 2001US-0337055P.
(RIBO-) RIBOZYME PHARM INC.
(BLAT/) BLATT L.
(MACE/) MACEJAK D.
(MCSW/) MCSWIGGEN J.
(MORR/) MORRISSEY D.
(PAVC/) PAVCO P.
(LEEP/) LEE P.
(DRAP/) DRAPER K.
(ROBE/) ROBERTS E.
Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
Draper K, Roberts E;
WPI; 2003-229207/22.
Novel compound useful for treating cirrhosis, liver failure,
hepatocellular carcinoma, or condition associated with hepatitis C virus
infection.
Claim 1; Page 243; 387pp; English.
The present invention relates to nucleic acid molecules which modulate
the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
are nucleic acid decoy molecules and aptamers that bind to HBV reverse
transcriptase and/or HBV reverse transcriptase primer sequences, as well
as oligonucleotides that specifically bind the Enhancer I region of HBV
DNA. The nucleic acids may be used to modulate the expression of HBV
genes and HBV viral replication. Also disclosed is a method for screening
compounds and/or potential therapies directed against HBV, and compounds
that modulate the expression and/or replication of HCV. The compounds and
methods of the invention are useful for the treatment of degenerative and
disease states related to HBV and HCV infection, replication and gene
expression such as cirrhosis, liver failure, and hepatocellular
carcinoma. The present sequence represents a substrate for one of the HCV
DNazyme or minus strand DNazyme sequences disclosed in the present
invention
Sequence 17 BP; 6 A; 5 C; 3 G; 0 T; 3 U; 0 Other;
Query Match 15.3%; Score 11.2; DB 1; Length 17;
Best Local Similarity 81.2%; Pred. No. 7.9e+02;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
949 TTAATGATACCTACC 964
|||||
17 TTAAGGTGTCGTACC 2
SULT 310
D65196/C
ACD65196 standard; RNA; 17 BP.
ACD65196;
30-SEP-2003 (first entry)

HCV minus strand DNazyme substrate sequence #1939.
Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
RNA stability; RNA expression; RNA synthesis; antisense;
enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;
amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
HBV reverse transcriptase; Enhancer I region; viral replication;
degenerative; disease state; HBV infection; HCV infection; cirrhosis;
liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
virucide; antiinflammatory; substrate; ss.
Hepatitis C virus.
WO200281494-A1.
17-OCT-2002.
26-MAR-2002; 2002WO-US009187.
26-MAR-2001; 2001US-00817879.
08-JUN-2001; 2001US-00877478.
08-JUN-2001; 2001US-0296876P.
24-OCT-2001; 2001US-0335059P.
05-DEC-2001; 2001US-0337055P.
(RIBO-) RIBOZYME PHARM INC.
(BLAT/) BLATT L.
(MACE/) MACEJAK D.
(MCSW/) MCSWIGGEN J.
(MORR/) MORRISSEY D.
(PAVC/) PAVCO P.
(LEEP/) LEE P.
(DRAP/) DRAPER K.
(ROBE/) ROBERTS E.
Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
Draper K, Roberts E;
WPI; 2003-229207/22.
Novel compound useful for treating cirrhosis, liver failure,
hepatocellular carcinoma, or condition associated with hepatitis C virus
infection.
Claim 1; Page 309; 387pp; English.
The present invention relates to nucleic acid molecules which modulate
the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
are nucleic acid decoy molecules and aptamers that bind to HBV reverse
transcriptase and/or HBV reverse transcriptase primer sequences, as well
as oligonucleotides that specifically bind the Enhancer I region of HBV
DNA. The nucleic acids may be used to modulate the expression of HBV
genes and HBV viral replication. Also disclosed is a method for screening
compounds and/or potential therapies directed against HBV, and compounds
that modulate the expression and/or replication of HCV. The compounds and
methods of the invention are useful for the treatment of degenerative and
disease states related to HBV and HCV infection, replication and gene
expression such as cirrhosis, liver failure, and hepatocellular
carcinoma. The present sequence represents a substrate for one of the HCV
DNazyme or minus strand DNazyme sequences disclosed in the present
invention
Sequence 17 BP; 7 A; 4 C; 4 G; 0 T; 2 U; 0 Other;
Query Match 15.3%; Score 11.2; DB 1; Length 17;
Best Local Similarity 81.2%; Pred. No. 7.9e+02;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
916 GGTCTTTGCGCTTTAT 931
|||||

D> 17 GGGCTTGCTATTAT 2

RESULT 311
ACD50468
ID ACD50468 standard; RNA; 17 BP.
XX
AC ACD50468;
XX
23-SEP-2003 (first entry)
XX
XX
XX HBV hammerhead ribozyme substrate sequence #87.
XX
KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW RNA stability; RNA expression; RNA synthesis; antisense;
KW enzymatic nucleic acid; hammerhead ribozyme; DNzyme; inozyme; zinzyme;
KW amberyse; G-cleaver ribozyme; decoy molecule; aptamer;
KW HBV reverse transcriptase; Enhancer I region; viral replication;
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW virucide; antiinflammatory; substrate; ss.
XX
XX Hepatitis B virus.
XX
XX WO200281494-A1.
XX
XX 17-OCT-2002.
XX
XX 26-MAR-2002; 2002WO-US009187.
XX
XX 26-MAR-2001; 2001US-00817879.
XX
XX 08-JUN-2001; 2001US-00877478.
XX
XX 08-JUN-2001; 2001US-0296876P.
XX
XX 24-OCT-2001; 2001US-0335059P.
XX
XX 05-DEC-2001; 2001US-0337055P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX (BLAT/) BLATT L.
XX
XX (MACE/) MACEJAK D.
XX
XX (MCSW/) MCSWIGGEN J.
XX
XX (MORR/) MORRISSEY D.
XX
XX (PAVC/) PAVCO P.
XX
XX (LEEP/) LEE P.
XX
XX (DRAP/) DRAPER K.
XX
XX (ROBE/) ROBERTS E.
XX
XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
XX Draper K, Roberts E;
XX WPI; 2003-229207/22.
XX
XX Novel compound useful for treating cirrhosis, liver failure,
XX hepatocellular carcinoma, or condition associated with hepatitis C virus
XX infection.
XX
XX Example 1; Page 137; 387pp; English.
XX
XX The present invention relates to nucleic acid molecules which modulate
XX the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
XX Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
XX and enzymatic nucleic acids such as hammerhead ribozymes, DNzymes,
XX inozymes, zinzymes, amberyse, and G-cleaver ribozymes. Also disclosed
XX are nucleic acid decoy molecules and aptamers that bind to HBV reverse
XX transcriptase and/or HBV reverse transcriptase primer sequences, as well
XX as oligonucleotides that specifically bind the Enhancer I region of HBV
XX DNA. The nucleic acids may be used to modulate the expression of HBV
XX genes and HBV viral replication. Also disclosed is a method for screening
XX compounds and/or potential therapies directed against HBV, and compounds
XX that modulate the expression and/or replication of HCV. The compounds and
XX methods of the invention are useful for the treatment of degenerative and
XX disease states related to HBV and HCV infection, replication and gene
XX expression such as cirrhosis, liver failure, and hepatocellular
XX carcinoma. The present sequence represents a substrate for one of the HBV

CC ribozyme, inozyme, G-cleaver, zinzyme, DNzyme or amberyse sequences
CC disclosed in the present invention

XX
SQ Sequence 17 BP; 2 A; 6 C; 1 G; 0 T; 8 U; 0 Other;
Query Match 15.3%; Score 11.2; DB 1; Length 17;
Best Local Similarity 37.5%; Pred. No. 7.9e+02;
Matches 6; Conservative 7; Mismatches 3; Indels 0; Gaps 0;

QY 929 TATCCCTCCTCTTCAT 944
:|: ||:| :||:| :
Db 2 UAUGGCUCAUCUUCUU 17

RESULT 312
ACD64855
ID ACD64855 standard; RNA; 17 BP.
XX
AC ACD64855;
XX
XX 30-SEP-2003 (first entry)
XX
XX HCV minus strand DNzyme substrate sequence #1766.
XX
XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
XX RNA stability; RNA expression; RNA synthesis; antisense;
XX enzymatic nucleic acid; hammerhead ribozyme; DNzyme; inozyme; zinzyme;
XX amberyse; G-cleaver ribozyme; decoy molecule; aptamer;
XX HBV reverse transcriptase; Enhancer I region; viral replication;
XX degenerative; disease state; HBV infection; HCV infection; cirrhosis;
XX liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
XX virucide; antiinflammatory; substrate; ss.
XX
XX Hepatitis C virus.
XX
XX WO200281494-A1.
XX
XX 17-OCT-2002.
XX
XX 26-MAR-2002; 2002WO-US009187.
XX
XX 26-MAR-2001; 2001US-00817879.
XX
XX 08-JUN-2001; 2001US-00877478.
XX
XX 08-JUN-2001; 2001US-0296876P.
XX
XX 24-OCT-2001; 2001US-0335059P.
XX
XX 05-DEC-2001; 2001US-0337055P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX (BLAT/) BLATT L.
XX
XX (MACE/) MACEJAK D.
XX
XX (MCSW/) MCSWIGGEN J.
XX
XX (MORR/) MORRISSEY D.
XX
XX (PAVC/) PAVCO P.
XX
XX (LEEP/) LEE P.
XX
XX (DRAP/) DRAPER K.
XX
XX (ROBE/) ROBERTS E.
XX
XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
XX Draper K, Roberts E;
XX WPI; 2003-229207/22.
XX
XX Novel compound useful for treating cirrhosis, liver failure,
XX hepatocellular carcinoma, or condition associated with hepatitis C virus
XX infection.
XX
XX Claim 1; Page 306; 387pp; English.
XX
XX The present invention relates to nucleic acid molecules which modulate
XX the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
XX Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
XX and enzymatic nucleic acids such as hammerhead ribozymes, DNzymes,
XX inozymes, zinzymes, amberyse, and G-cleaver ribozymes. Also disclosed
XX are nucleic acid decoy molecules and aptamers that bind to HBV reverse
XX transcriptase and/or HBV reverse transcriptase primer sequences, as well
XX as oligonucleotides that specifically bind the Enhancer I region of HBV
XX DNA. The nucleic acids may be used to modulate the expression of HBV
XX genes and HBV viral replication. Also disclosed is a method for screening
XX compounds and/or potential therapies directed against HBV, and compounds
XX that modulate the expression and/or replication of HCV. The compounds and
XX methods of the invention are useful for the treatment of degenerative and
XX disease states related to HBV and HCV infection, replication and gene
XX expression such as cirrhosis, liver failure, and hepatocellular
XX carcinoma. The present sequence represents a substrate for one of the HBV

are nucleic acid decoy molecules and aptamers that bind to HBV reverse transcriptase and/or HBV reverse transcriptase primer sequences, as well as oligonucleotides that specifically bind the Enhancer I region of HBV DNA. The nucleic acids may be used to modulate the expression of HBV genes and HBV viral replication. Also disclosed is a method for screening compounds and/or potential therapies directed against HBV, and compounds that modulate the expression and/or replication of HCV. The compounds and methods of the invention are useful for the treatment of degenerative and disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepatocellular carcinoma. The present sequence represents a substrate for one of the HCV DNzyme or minus strand DNzyme sequences disclosed in the present invention

Sequence 17 BP; 3 A; 3 C; 5 G; 0 T; 6 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;
Best Local Similarity 50.0%; Pred. No. 7.9e+02;
Matches 8; Conservative 5; Mismatches 3; Indels 0; Gaps 0;

949 TTAATGTATCGCTACC 964
::|||:::||||:||||
2 UUAAGGUGUGUACC 17

RESULT 313
AC64042
ACC64042 standard; DNA; 17 BP.

ACC64042;

01-JUL-2003 (first entry)

Murine oligonucleotide associated with tumour suppression, SEQ ID 1289.

Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine; tumour suppression; tumour reversion; apoptosis; virus resistance; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; ss.

Mus musculus.

WO2003025176-A2.

27-MAR-2003.

17-SEP-2002; 2002WO-IB004210.

17-SEP-2001; 2001FR-00011979.

(MOLE-) MOLECULAR ENGINES LAB.

Telerman A, Amson R, Tuijnder M;

WPI; 2003-333167/31.

New isolated nucleic acid, useful for treating viral diseases associated with tumours and cell degeneration, also related polypeptides, antibodies and transfected cells.

Disclosure; Page 181; 738pp; French.

The present invention relates to murine oligonucleotides (ACC62754-ACC68806), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligonucleotides are useful as (1) as probes and primers for detecting, identifying, quantifying and/or amplifying nucleic acid, e.g. as one component of a gene chip; in vitro as (anti)sense reagents; and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia

SQ Sequence 17 BP; 5 A; 4 C; 1 G; 7 T; 0 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;
Best Local Similarity 81.2%; Pred. No. 7.9e+02;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 930 ATCCCTCCTCTTCATT 945

DB 2 ATCCCTACTATTAAAT 17

RESULT 314
ADB40878/c

ID ADB40878 standard; DNA; 17 BP.

XX ADB40878;

XX 18-DEC-2003 (revised)

DT 04-DEC-2003 (first entry)

XX Tumour suppression/reversion associated nucleotide #1201.

XX cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
KW primer; probe; tumour suppression; tumour reversion; apoptosis;
KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
KW diagnosis.

XX Homo sapiens.

XX WO2003040369-A2.

XX 15-MAY-2003.

XX 17-SEP-2002; 2002WO-IB004219.

XX 17-SEP-2001; 2001FR-00011981.

XX (MOLE-) MOLECULAR ENGINES LAB.

XX Telerman A, Amson R, Tuijnder M;

XX WPI; 2003-441574/41.

XX New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumours and viral infection, also related polypeptide and antibodies.

XX Disclosure; Page 172; 771pp; French.

XX The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the nucleotides. The nucleotides are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours or cell degeneration (e.g. Alzheimer's disease or schizophrenia). Analysis of the expression of the nucleotides can be used for diagnosis and/or prognosis of these diseases. The nucleotides and polypeptides can also be used to screen for their specific interactive molecules, potentially useful for treating diseases associated with abnormal expression of the nucleotides.

SQ Sequence 17 BP; 6 A; 2 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;

Best Local Similarity 81.2%; Pred. No. 7.9e+02; Mismatches 3; Indels 0; Gaps 0;
Matches 13; Conservative 0;

QY 933 CTTCTTCATGTTT 948
| | | | | | | | | |
17 CATCTTCATGTTGAT 2

Db

RESULT 315
ADB42247
ID ADB42247 standard; DNA; 17 BP.
AC
AC ADB42247;
XX
XX 18-DEC-2003 (revised)
DT 04-DEC-2003 (first entry)
XX
XX Tumour suppression/reversion associated nucleotide #2570.
XX
XX cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
XX primer; probe; tumour suppression; tumour reversion; apoptosis;
XX virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
XX diagnosis.
XX
XX Homo sapiens.
OS
XX WO2003040369-A2.
XX
XX 15-MAY-2003.
XX
XX 17-SEP-2002; 2002WO-IB004219.
XX
XX 17-SEP-2001; 2001FR-00011981.
XX
XX (MOLE-) MOLECULAR ENGINES LAB.
XX
XX Telerman A, Amson R, Tuijnder M;
XX WPI; 2003-441574/41.
XX
XX New nucleic acid encoding human prostate membrane-specific antigen,
XX useful e.g. for treatment of tumors and viral infection, also related
XX polypeptide and antibodies.
XX
XX Disclosure; Page 332; 771pp; French.
XX
XX The invention relates to the isolation of 6327 nucleotide sequences,
XX fragments of at least 15 consecutive nucleotides of these nucleotides, a
XX sequence having at least 80% identity, after optimal alignment, with the
XX nucleotides, a sequence that hybridizes under stringent conditions with
XX the nucleotides, or the complement, or corresponding RNA, of the
XX nucleotides. The nucleotides are used as probes or primers for detecting,
XX identifying, quantifying and/or amplifying nucleic acids, as in vitro
XX sense and antisense sequences, of nucleotides involved in tumour
XX suppression or reversion, apoptosis and or viral resistance, to produce
XX recombinant polypeptides, and to prepare transgenic animals, as
XX experimental models. The nucleotides (also vectors containing them and
XX cells containing the vectors), the encoded polypeptides and antibodies
XX (Ab) against the polypeptide are useful for prevention and/or treatment
XX of viral infections or diseases characterized by development of tumours
XX or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
XX Analysis of the expression of the nucleotides can be used for diagnosis
XX and/or prognosis of these diseases. The nucleotides and polypeptides can
XX also be used to screen for their specific interactive molecules,
XX potentially useful for treating diseases associated with abnormal
XX expression of the nucleotides.
XX
SQ Sequence 17 BP; 2 A; 3 C; 2 G; 10 T; 0 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;
Best Local Similarity 81.2%; Pred. No. 7.9e+02;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 933 CTTCTTCATGTTT 950
| | | | | | | | | |
2 TCTTCTTCATGTTT 17

Db

RESULT 317
ADC04002
ID ADC04002 standard; DNA; 17 BP.
XX
XX AC ADC04002;

QY 916 GGTCTTTGCTTTTAT 931
| | | | | | | | | |
1 GATCTTTCTGTTAT 16

Db

RESULT 316
ADC03999
ID ADC03999 standard; DNA; 17 BP.
XX
XX AC ADC03999;
XX
XX 18-DEC-2003 (first entry)
XX
XX Human Na/H exchanger-like protein 1 gene oligonucleotide #446.
DE
XX ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein;
XX NHLEP1; passive replacement therapy; vaccine; diagnosis.
XX
XX Homo sapiens.
XX
XX EP1273660-A2.
PN
XX 08-JAN-2003.
PD
XX 25-JAN-2002; 2002EP-00001160.
PF
XX 30-JAN-2001; 2001WO-US000666.
PR
XX 23-MAY-2001; 2001US-00864761.
PR
XX 21-DEC-2001; 2001US-0343331P.
XX
XX (AEOM-) AEOMICA INC.
PA
XX Gu Y;
PI
XX WPI; 2003-302724/30.
DR
XX
XX New human sodium-hydrogen exchanger like protein 1 (NHLEP1), useful as a
XX passive replacement therapy or as a vaccine for treating or preventing
XX disorders associated with aberrant expression or activity of human
XX NHLEP1.
XX
XX Example 2; SEQ ID NO 486; 468pp; English.
XX
XX The invention relates to a nucleic acid molecule which encodes a Na+/H+
XX exchanger like protein (NHLEP1). The NHLEP1 nucleic acid molecule, NHLEP1
XX polypeptide, an antibody against the protein or its antigen-binding
XX fragment is useful in therapy. The NHLEP1 nucleic acid molecule, NHLEP1
XX polypeptide and an agonist are particularly useful for manufacturing a
XX medicament for treating or preventing a disorder associated with
XX decreased expression or activity of human NHLEP1. The antibody or its
XX antigen-binding fragment, and an antagonist, are useful for manufacturing
XX a medicament for treating or preventing a disorder associated with
XX increased expression or activity of human NHLEP1. The NHLEP1 nucleic acid
XX or protein is useful as passive replacement therapy, as a vaccine, or in
XX diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide
XX spanning the sequence of the human NHLEP1 gene (ADC03514).
XX
SQ Sequence 17 BP; 3 A; 3 C; 1 G; 10 T; 0 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;
Best Local Similarity 81.2%; Pred. No. 7.9e+02;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 935 TCTTCTTCATGTTT 950
| | | | | | | | | |
2 TCTTCTTCATGTTT 17

Db

RESULT 317
ADC04002
ID ADC04002 standard; DNA; 17 BP.
XX
XX AC ADC04002;

18-DEC-2003 (first entry)
 Human Na/H exchanger-like protein 1 gene oligonucleotide #449.
 ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein;
 NHELP1; passive replacement therapy; vaccine; diagnosis.
 Homo sapiens.
 EP1273660-A2.
 08-JAN-2003.
 25-JAN-2002; 2002EP-00001160.
 30-JAN-2001; 2001WO-US000666.
 23-MAY-2001; 2001US-00864761.
 21-DEC-2001; 2001US-0343331P.
 (AEOM-) AEOMICA INC.
 Gu Y;
 WPI; 2003-302724/30.
 New human sodium-hydrogen exchanger like protein 1 (NHELP1), useful as a
 passive replacement therapy or as a vaccine for treating or preventing
 disorders associated with aberrant expression or activity of human
 NHELP1.
 Example 2; SEQ ID NO 489; 468pp; English.
 The invention relates to a nucleic acid molecule which encodes a Na⁺/H⁺
 exchanger like protein (NHELP1). The NHELP1 nucleic acid molecule, NHELP1
 polypeptide, an antibody against the protein or its antigen-binding
 fragment is useful in therapy. The NHELP1 nucleic acid molecule, NHELP1
 polypeptide and an agonist are particularly useful for manufacturing a
 medicament for treating or preventing a disorder associated with
 decreased expression or activity of human NHELP1. The antibody or its
 antigen-binding fragment, and an antagonist, are useful for manufacturing
 a medicament for treating or preventing a disorder associated with
 increased expression or activity of human NHELP1. The NHELP1 nucleic acid
 or protein is useful as passive replacement therapy, as a vaccine, or in
 diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide
 spanning the sequence of the human NHELP1 gene (ADC03514).
 Sequence 17 BP; 3 A; 3 C; 1 G; 10 T; 0 U; 0 Other;
 Query Match 15.3%; Score 11.2; DB 1; Length 17;
 Best Local Similarity 81.2%; Pred. No. 7.9e+02;
 Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 938 TCCTCATGTTTAAAT 953
 2 TCCTCATGTTTAAAT 17
 SUIT 318
 C04126
 ADC04126 standard; DNA; 17 BP.
 ADC04126;
 18-DEC-2003 (first entry)
 Human Na/H exchanger-like protein 1 gene oligonucleotide #573.
 ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein;
 NHELP1; passive replacement therapy; vaccine; diagnosis.
 Homo sapiens.

PN EP1273660-A2.
 XX
 PD 08-JAN-2003.
 XX
 PF 25-JAN-2002; 2002EP-00001160.
 XX
 PR 30-JAN-2001; 2001WO-US000666.
 PR 23-MAY-2001; 2001US-00864761.
 PR 21-DEC-2001; 2001US-0343331P.
 XX
 PA (AEOM-) AEOMICA INC.
 XX
 PI Gu Y;
 XX
 DR WPI; 2003-302724/30.
 XX
 PT New human sodium-hydrogen exchanger like protein 1 (NHELP1), useful as a
 PT passive replacement therapy or as a vaccine for treating or preventing
 PT disorders associated with aberrant expression or activity of human
 PT NHELP1.
 XX
 PS Example 2; SEQ ID NO 613; 468pp; English.
 XX
 CC The invention relates to a nucleic acid molecule which encodes a Na⁺/H⁺
 CC exchanger like protein (NHELP1). The NHELP1 nucleic acid molecule, NHELP1
 CC polypeptide, an antibody against the protein or its antigen-binding
 CC fragment is useful in therapy. The NHELP1 nucleic acid molecule, NHELP1
 CC polypeptide and an agonist are particularly useful for manufacturing a
 CC medicament for treating or preventing a disorder associated with
 CC decreased expression or activity of human NHELP1. The antibody or its
 CC antigen-binding fragment, and an antagonist, are useful for manufacturing
 CC a medicament for treating or preventing a disorder associated with
 CC increased expression or activity of human NHELP1. The NHELP1 nucleic acid
 CC or protein is useful as passive replacement therapy, as a vaccine, or in
 CC diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide
 CC spanning the sequence of the human NHELP1 gene (ADC03514).
 XX
 SQ Sequence 17 BP; 4 A; 2 C; 4 G; 7 T; 0 U; 0 Other;
 Query Match 15.3%; Score 11.2; DB 1; Length 17;
 Best Local Similarity 81.2%; Pred. No. 7.9e+02;
 Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 938 TCCTCATGTTTAAAT 953
 DB 1 TCGTCATAGGGTTAAAT 16
 RESULT 319
 ADC04004
 ID ADC04004 standard; DNA; 17 BP.
 XX
 AC ADC04004;
 XX
 DT 18-DEC-2003 (first entry)
 XX
 DE Human Na/H exchanger-like protein 1 gene oligonucleotide #451.
 XX
 KW ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein;
 KW NHELP1; passive replacement therapy; vaccine; diagnosis.
 XX
 OS Homo sapiens.
 XX
 PN EP1273660-A2.
 XX
 PD 08-JAN-2003.
 XX
 PF 25-JAN-2002; 2002EP-00001160.
 XX
 PR 30-JAN-2001; 2001WO-US000666.
 PR 23-MAY-2001; 2001US-00864761.
 PR 21-DEC-2001; 2001US-0343331P.
 XX


```

FA (AEOM-) AEOMICA INC.
XX
XX Gu Y;
XX WPI; 2003-302724/30.
XX New human sodium-hydrogen exchanger like protein 1 (NHEP1), useful as a
XX passive replacement therapy or as a vaccine for treating or preventing
XX disorders associated with aberrant expression or activity of human
XX NHEP1.
XX
XX Example 2; SEQ ID NO 491; 468pp; English.
XX
XX The invention relates to a nucleic acid molecule which encodes a Na+/H+
XX exchanger like protein (NHEP1). The NHEP1 nucleic acid molecule, NHEP1
XX polypeptide, an antibody against the protein or its antigen-binding
XX fragment is useful in therapy. The NHEP1 nucleic acid molecule, NHEP1
XX polypeptide and an agonist are particularly useful for manufacturing a
XX medicament for treating or preventing a disorder associated with
XX decreased expression or activity of human NHEP1. The antibody or its
XX antigen-binding fragment, and an antagonist, are useful for manufacturing
XX a medicament for treating or preventing a disorder associated with
XX increased expression or activity of human NHEP1. The NHEP1 nucleic acid
XX or protein is useful as passive replacement therapy, as a vaccine, or in
XX diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide
XX spanning the sequence of the human NHEP1 gene (ADC03514).
XX
XX Sequence 17 BP; 3 A; 4 C; 2 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 15.3%; Score 11.2; DB 1; Length 17;
XX Best Local Similarity 81.2%; Pred. No. 7.9e+02;
XX Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
QY 939 CTTCAATGCGTTTAATG 954
DB ||||| ||||| ||
1 CTTCAATGTTTACTG 16
XX
XX RESULT 320
XX ADC04260
XX ID ADC04260 standard; DNA; 17 BP.
XX AC ADC04260;
XX DT 18-DEC-2003 (first entry)
XX DE Human Na/H exchanger-like protein 1 gene oligonucleotide #707.
XX KW ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein;
XX NHEP1; passive replacement therapy; vaccine; diagnosis.
XX OS Homo sapiens.
XX PN EP1273660-A2.
XX PD 08-JAN-2003.
XX PF 25-JAN-2002; 2002EP-00001160.
XX PR 30-JAN-2001; 2001WO-US0000666.
XX PR 23-MAY-2001; 2001US-00864761.
XX PR 21-DEC-2001; 2001US-0343331P.
XX PA (AEOM-) AEOMICA INC.
XX PI Gu Y;
XX PT WPI; 2003-302724/30.
XX
XX New human sodium-hydrogen exchanger like protein 1 (NHEP1), useful as a
XX passive replacement therapy or as a vaccine for treating or preventing
XX disorders associated with aberrant expression or activity of human
XX NHEP1.
XX
XX Example 2; SEQ ID NO 491; 468pp; English.
XX
XX The invention relates to a nucleic acid molecule which encodes a Na+/H+
XX exchanger like protein (NHEP1). The NHEP1 nucleic acid molecule, NHEP1
XX polypeptide, an antibody against the protein or its antigen-binding
XX fragment is useful in therapy. The NHEP1 nucleic acid molecule, NHEP1
XX polypeptide and an agonist are particularly useful for manufacturing a
XX medicament for treating or preventing a disorder associated with
XX decreased expression or activity of human NHEP1. The antibody or its
XX antigen-binding fragment, and an antagonist, are useful for manufacturing
XX a medicament for treating or preventing a disorder associated with
XX increased expression or activity of human NHEP1. The NHEP1 nucleic acid
XX or protein is useful as passive replacement therapy, as a vaccine, or in
XX diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide
XX spanning the sequence of the human NHEP1 gene (ADC03514).
XX
XX Sequence 17 BP; 3 A; 4 C; 2 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 15.3%; Score 11.2; DB 1; Length 17;
XX Best Local Similarity 81.2%; Pred. No. 7.9e+02;
XX Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
QY 939 CTTCAATGCGTTTAATG 954
DB ||||| ||||| ||
1 CTTCAATGTTTACTG 16
XX
XX RESULT 320
XX ADC04260
XX ID ADC04260 standard; DNA; 17 BP.
XX AC ADC04260;
XX DT 18-DEC-2003 (first entry)
XX DE Human Na/H exchanger-like protein 1 gene oligonucleotide #707.
XX KW ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein;
XX NHEP1; passive replacement therapy; vaccine; diagnosis.
XX OS Homo sapiens.
XX PN EP1273660-A2.
XX PD 08-JAN-2003.
XX PF 25-JAN-2002; 2002EP-00001160.
XX PR 30-JAN-2001; 2001WO-US0000666.
XX PR 23-MAY-2001; 2001US-00864761.
XX PR 21-DEC-2001; 2001US-0343331P.
XX PA (AEOM-) AEOMICA INC.
XX PI Gu Y;
XX PT WPI; 2003-302724/30.
XX
XX New human sodium-hydrogen exchanger like protein 1 (NHEP1), useful as a
XX passive replacement therapy or as a vaccine for treating or preventing
XX disorders associated with aberrant expression or activity of human
XX NHEP1.

```

```

XX
XX Example 2; SEQ ID NO 747; 468pp; English.
XX
XX The invention relates to a nucleic acid molecule which encodes a Na+/H+
XX exchanger like protein (NHEP1). The NHEP1 nucleic acid molecule, NHEP1
XX polypeptide, an antibody against the protein or its antigen-binding
XX fragment is useful in therapy. The NHEP1 nucleic acid molecule, NHEP1
XX polypeptide and an agonist are particularly useful for manufacturing a
XX medicament for treating or preventing a disorder associated with
XX decreased expression or activity of human NHEP1. The antibody or its
XX antigen-binding fragment, and an antagonist, are useful for manufacturing
XX a medicament for treating or preventing a disorder associated with
XX increased expression or activity of human NHEP1. The NHEP1 nucleic acid
XX or protein is useful as passive replacement therapy, as a vaccine, or in
XX diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide
XX spanning the sequence of the human NHEP1 gene (ADC03514).
XX
XX Sequence 17 BP; 3 A; 5 C; 3 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 15.3%; Score 11.2; DB 1; Length 17;
XX Best Local Similarity 81.2%; Pred. No. 7.9e+02;
XX Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
QY 901 CTGGTCATTTTCTTGTG 916
DB ||||| ||||| ||
1 CTGGCCATTTTCCATG 16
XX
XX RESULT 321
XX ADC04125
XX ID ADC04125 standard; DNA; 17 BP.
XX AC ADC04125;
XX DT 18-DEC-2003 (first entry)
XX DE Human Na/H exchanger-like protein 1 gene oligonucleotide #572.
XX KW ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein;
XX NHEP1; passive replacement therapy; vaccine; diagnosis.
XX OS Homo sapiens.
XX PN EP1273660-A2.
XX PD 08-JAN-2003.
XX PF 25-JAN-2002; 2002EP-00001160.
XX PR 30-JAN-2001; 2001WO-US0000666.
XX PR 23-MAY-2001; 2001US-00864761.
XX PR 21-DEC-2001; 2001US-0343331P.
XX PA (AEOM-) AEOMICA INC.
XX PI Gu Y;
XX PT WPI; 2003-302724/30.
XX
XX New human sodium-hydrogen exchanger like protein 1 (NHEP1), useful as a
XX passive replacement therapy or as a vaccine for treating or preventing
XX disorders associated with aberrant expression or activity of human
XX NHEP1.
XX
XX Example 2; SEQ ID NO 612; 468pp; English.
XX
XX The invention relates to a nucleic acid molecule which encodes a Na+/H+
XX exchanger like protein (NHEP1). The NHEP1 nucleic acid molecule, NHEP1
XX polypeptide, an antibody against the protein or its antigen-binding
XX fragment is useful in therapy. The NHEP1 nucleic acid molecule, NHEP1
XX polypeptide and an agonist are particularly useful for manufacturing a
XX medicament for treating or preventing a disorder associated with
XX decreased expression or activity of human NHEP1. The antibody or its

```

antigen-binding fragment, and an antagonist, are useful for manufacturing a medicament for treating or preventing a disorder associated with increased expression or activity of human NHELP1. The NHELP1 nucleic acid or protein is useful as passive replacement therapy, as a vaccine, or in diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide spanning the sequence of the human NHELP1 gene (ADC03514).

Sequence 17 BP; 5 A; 2 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;

Best Local Similarity 81.2%; Pred. No. 7.9e+02; Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

938 TCTTCATTGGTTTAAT 953

||||| ||||| ||||| ||||| |||||

2 TCGTCATAGGGTTAAT 17

RESULT 322

ADC04259

ADC04259 standard; DNA; 17 BP.

ADC04259;

18-DEC-2003 (first entry)

Human Na/H exchanger-like protein 1 gene oligonucleotide #706.

ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein; NHELP1; passive replacement therapy; vaccine; diagnosis.

Homo sapiens.

EP1273660-A2.

08-JAN-2003.

25-JAN-2002; 2002EP-00001160.

30-JAN-2001; 2001WO-US000666.

23-MAY-2001; 2001US-00864761.

21-DEC-2001; 2001US-0343331P.

(AEOM-) AEOMICA INC.

Gu Y;

WPI; 2003-302724/30.

New human sodium-hydrogen exchanger like protein 1 (NHELP1), useful as a passive replacement therapy or as a vaccine for treating or preventing disorders associated with aberrant expression or activity of human NHELP1.

Example 2; SEQ ID NO 746; 468pp; English.

The invention relates to a nucleic acid molecule which encodes a Na+/H+ exchanger like protein (NHELP1). The NHELP1 nucleic acid molecule, NHELP1 polypeptide, an antibody against the protein or its antigen-binding fragment is useful in therapy. The NHELP1 nucleic acid molecule, NHELP1 polypeptide and an agonist are particularly useful for manufacturing a medicament for treating or preventing a disorder associated with decreased expression or activity of human NHELP1. The antibody or its antigen-binding fragment, and an antagonist, are useful for manufacturing a medicament for treating or preventing a disorder associated with increased expression or activity of human NHELP1. The NHELP1 nucleic acid or protein is useful as passive replacement therapy, as a vaccine, or in diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide spanning the sequence of the human NHELP1 gene (ADC03514).

Sequence 17 BP; 2 A; 5 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;

Best Local Similarity 81.2%; Pred. No. 7.9e+02;

Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 901 CTGGTCATTTCTTTTG 916

||||| ||||| ||||| |||||

Db 2 CTGGCCATTTTCCATG 17

RESULT 323

ADC04001

ID ADC04001 standard; DNA; 17 BP.

XX AC ADC04001;

DT 18-DEC-2003 (first entry)

DE Human Na/H exchanger-like protein 1 gene oligonucleotide #448.

ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein; NHELP1; passive replacement therapy; vaccine; diagnosis.

XX Homo sapiens.

XX EP1273660-A2.

XX 08-JAN-2003.

XX 25-JAN-2002; 2002EP-00001160.

XX 30-JAN-2001; 2001WO-US000666.

XX 23-MAY-2001; 2001US-00864761.

XX 21-DEC-2001; 2001US-0343331P.

XX (AEOM-) AEOMICA INC.

XX Gu Y;

XX WPI; 2003-302724/30.

New human sodium-hydrogen exchanger like protein 1 (NHELP1), useful as a passive replacement therapy or as a vaccine for treating or preventing disorders associated with aberrant expression or activity of human NHELP1.

Example 2; SEQ ID NO 488; 468pp; English.

The invention relates to a nucleic acid molecule which encodes a Na+/H+ exchanger like protein (NHELP1). The NHELP1 nucleic acid molecule, NHELP1 polypeptide, an antibody against the protein or its antigen-binding fragment is useful in therapy. The NHELP1 nucleic acid molecule, NHELP1 polypeptide and an agonist are particularly useful for manufacturing a medicament for treating or preventing a disorder associated with decreased expression or activity of human NHELP1. The antibody or its antigen-binding fragment, and an antagonist, are useful for manufacturing a medicament for treating or preventing a disorder associated with increased expression or activity of human NHELP1. The NHELP1 nucleic acid or protein is useful as passive replacement therapy, as a vaccine, or in diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide spanning the sequence of the human NHELP1 gene (ADC03514).

Sequence 17 BP; 3 A; 4 C; 1 G; 9 T; 0 U; 0 Other;

Query Match 15.3%; Score 11.2; DB 1; Length 17;

Best Local Similarity 81.2%; Pred. No. 7.9e+02; Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 936 CCTTCATTCGTTTA 951

||||| ||||| ||||| |||||

Db 1 CTTCITCAATGTTTA 16

RESULT 324

ADB45052/c

WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
Claim 1; SEQ ID NO 291807; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABH00010-ABH99989 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
Sequence 12 BP; 2 A; 5 C; 0 G; 5 T; 0 U; 0 Other;
Query Match 15.1%; Score 11; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
928 TTATCCCTCCT 938
|||||
2 TTATCCCTCCT 12
RESULT 327
H75494/C
ABH75494 standard; DNA; 12 BP.
ABH75494;
22-FEB-2002 (first entry)
Oligonucleotide primer SEQ ID NO 275485 for detecting SNP TSC0003907.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;

DR WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
PT Claim 1; SEQ ID NO 275485; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABH00010-ABH99989 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX Sequence 12 BP; 7 A; 3 C; 0 G; 2 T; 0 U; 0 Other;
SQ Query Match 15.1%; Score 11; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 945 TGGTTTAATGT 955
|||||
12 TGGTTTAATGT 2
Db
RESULT 328
ABI08662
ID ABI08662 standard; DNA; 12 BP.
XX AC ABI08662;
XX DT 22-FEB-2002 (first entry)
XX DE Oligonucleotide primer SEQ ID NO 308635 for detecting SNP TSC0023137.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
OS Homo sapiens.
XX WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
XX Claim 1; SEQ ID NO 308635; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABH00010-ABH99989 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 CC
 XX Sequence 12 BP; 1 A; 6 C; 1 G; 4 T; 0 U; 0 Other;
 SQ

Query Match 15.1%; Score 11; DB 1; Length 12;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 930 ATCCCTCCTCT 940
 Db 2 ATCCCTCCTCT 12
 |||||

RESULT 329
 ABH71304
 ID ABH71304 standard; DNA; 12 BP.
 XX AC
 AC ABH71304;
 XX
 DT 22-FEB-2002 (first entry)
 XX
 XX Oligonucleotide primer SEQ ID NO 271281 for detecting SNP TSC0002451.
 DE
 DE
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 FN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 271281; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 CC
 XX Sequence 12 BP; 2 A; 0 C; 4 G; 6 T; 0 U; 0 Other;
 SQ

Query Match 15.1%; Score 11; DB 1; Length 12;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 943 ATTGTTTAAAT 953
 Db 12 ATTGTTTAAAT 2
 |||||

RESULT 331
 ABI63498
 ID ABI63498 standard; DNA; 12 BP.
 XX AC
 AC ABI63498;
 XX
 DT 22-FEB-2002 (first entry)
 XX

QY 944 TTGGTTTAAATG 954
 Db 2 TTGGTTTAAATG 12
 |||||

RESULT 330
 ABI61761/C
 ID ABI61761 standard; DNA; 12 BP.
 XX AC
 AC ABI61761;
 XX
 DT 22-FEB-2002 (first entry)
 XX
 XX Oligonucleotide primer SEQ ID NO 361734 for detecting SNP TSC0052796.
 DE
 DE
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 FN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 361734; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 CC
 XX Sequence 12 BP; 6 A; 2 C; 0 G; 4 T; 0 U; 0 Other;
 SQ

Query Match 15.1%; Score 11; DB 1; Length 12;
 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
 Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 943 ATTGTTTAAAT 953
 Db 12 ATTGTTTAAAT 2
 |||||

RESULT 331
 ABI63498
 ID ABI63498 standard; DNA; 12 BP.
 XX AC
 AC ABI63498;
 XX
 DT 22-FEB-2002 (first entry)
 XX

```

1  Oligonucleotide primer SEQ ID NO 363471 for detecting SNP TSC0053873.
2  SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
3  Peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
4  central nervous system; gastrointestinal; respiratory; immune; metabolic.
5  Homo sapiens.
6  WO200177384-A2.
7  18-OCT-2001.
8  06-APR-2001; 2001WO-IB000713.
9  07-APR-2000; 2000DE-01019173.
10 (EPIG-) EPIGENOMICS AG.
11 Olek A, Piepenbrock C, Berlin K;
12 WPI; 2001-657177/75.
13 Set of oligonucleotides, useful for diagnosis and cell typing, is
14 designed to detect single-nucleotide polymorphisms and cytosine
15 methylation status.
16 Claim 1; SEQ ID NO 363471; 29pp + Sequence Listing; German.
17 This invention describes novel oligonucleotide primers or peptide nucleic
18 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
19 and cytosine methylation status in chemically pretreated genomic DNA. The
20 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
21 range of diseases including immune system, gastrointestinal, respiratory,
22 central nervous system, cardiovascular and metabolic disorders. The
23 oligomers are also used for detecting cell type differentiation. ABC00010
24 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
25 represent the oligomers described in the invention. NOTE: The sequence
26 data for this patent did not form part of the printed specification, but
27 was obtained in electronic format from WIPO at
28 ftp.wipo.int/pub/published_pct_sequences
29 Sequence 12 BP; 1 A; 6 C; 0 G; 5 T; 0 U; 0 Other;
30 Query Match 15.1%; Score 11; DB 1; Length 12;
31 Best Local Similarity 100.0%; Pred. No. 6.8e+02;
32 Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
33 931 TCCCTCCCTCTT 941
34 |||||
35 1 TCCCTCCCTCTT 11
36
37 SULT 332
38 IS1405/c
39 ABI51405 standard; DNA; 12 BP.
40 ABI51405;
41 22-FEB-2002 (first entry)
42 Oligonucleotide primer SEQ ID NO 351378 for detecting SNP TSC0047263.
43 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
44 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
45 central nervous system; gastrointestinal; respiratory; immune; metabolic.
46 Homo sapiens.
47 WO200177384-A2.
48 18-OCT-2001.

```

```

PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
PA
XX Olek A, Piepenbrock C, Berlin K;
PI
XX WPI; 2001-657177/75.
XX
DR Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
PT
XX Claim 1; SEQ ID NO 351378; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 12 BP; 8 A; 0 C; 3 G; 1 T; 0 U; 0 Other;
Query Match 15.1%; Score 11; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 905 TCATTTTCCTT 915
DB 12 TCATTTTCCTT 2
|||
RESULT 333
ABI71629/c
ID ABI71629 standard; DNA; 12 BP.
XX
AC ABI71629;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide primer SEQ ID NO 371602 for detecting SNP TSC0058884.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
DR Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.

```



```
RESULT 336
AB08661
AB08661 standard; DNA; 12 BP.
AB08661;
22-FEB-2002 (first entry)
Oligonucleotide primer SEQ ID NO 308634 for detecting SNP TSC0023137.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 308634; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 12 BP; 2 A; 6 C; 0 G; 4 T; 0 U; 0 Other;
Query Match 15.1%; Score 11; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 6.8e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
930 ATCCCTCCTCT 940
|||||
2 ATCCCTCCTCT 12
SULT 337
F78022
ABF78022 standard; DNA; 13 BP.
ABF78022;
22-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 178019 for detecting SNP TSC0044112.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
```

```
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 178019; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 4 A; 0 C; 2 G; 6 T; 0 U; 1 Other;
Query Match 15.1%; Score 11; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 7.2e+02;
Matches 11; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
QY 948 TTTAATGTATCGC 960
|||||
Db 1 TTTAATGTATAGY 13
RESULT 338
ABF71907/c
ID ABF71907 standard; DNA; 13 BP.
XX ABF71907;
XX AC ABF71907;
XX 22-FEB-2002 (first entry)
XX DT
XX DE Oligonucleotide SEQ ID NO 171904 for detecting SNP TSC0042851.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
```



```
Query Match      15.1%; Score 11; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 7.2e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

    947 GTTAAATGAT 957
      |||||
      1 GTTAAATGAT 11

.SULT 341
H16022
ABH16022 standard; DNA; 13 BP.
ABH16022;
22-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 215999 for detecting SNP TSC0052522.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 215999; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligomers are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 4 A; 0 C; 2 G; 7 T; 0 U; 0 Other;

This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligomers are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 4 A; 0 C; 2 G; 7 T; 0 U; 0 Other;

Query Match      15.1%; Score 11; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 7.2e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

    943 ATTGGTTTAAAT 953
      |||||
      1 ATTGGTTTAAAT 11

.SULT 342
H12113/C
ABH12113 standard; DNA; 13 BP.
```

```

XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 184804; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 6 A; 3 C; 0 G; 3 T; 0 U; 1 Other;
XX
XX Query Match 15.1%; Score 11; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 7.2e+02;
XX Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Q/ 947 GTTTAATGTAT 957
XX Db 13 GTTTAATGTAT 3
XX
XX RESULT 344
XX ABC72133
XX ID ABC72133 standard; DNA; 13 BP.
XX
XX AC ABC72133;
XX
XX DT 21-FEB-2002 (first entry)
XX
XX DE Oligonucleotide SEQ ID NO 72150 for detecting SNP TSC0018645.
XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX OS Homo sapiens.
XX
XX PN WO200177384-A2.
XX
XX PD 18-OCT-2001.
XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX
XX PR Oligonucleotide SEQ ID NO 72150 for detecting SNP TSC0018645.
XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX OS Homo sapiens.
XX
XX PN WO200177384-A2.
XX
XX PD 18-OCT-2001.
XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX
XX PR 07-APR-2000; 2000DE-01019173.
XX
XX PA (EPIG-) EPIGENOMICS AG.
XX
XX PI Olek A, Piepenbrock C, Berlin K;
XX
XX DR WPI; 2001-657177/75.
XX
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 184804; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 6 A; 3 C; 0 G; 3 T; 0 U; 1 Other;
XX
XX Query Match 15.1%; Score 11; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 7.2e+02;
XX Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Q/ 947 GTTTAATGTAT 957
XX Db 13 GTTTAATGTAT 3
XX
XX RESULT 344
XX ABC72133
XX ID ABC72133 standard; DNA; 13 BP.
XX
XX AC ABC72133;
XX
XX DT 21-FEB-2002 (first entry)
XX
XX DE Oligonucleotide SEQ ID NO 72150 for detecting SNP TSC0018645.
XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX OS Homo sapiens.
XX
XX PN WO200177384-A2.
XX
XX PD 18-OCT-2001.
XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX
XX PR 07-APR-2000; 2000DE-01019173.
XX
XX PA (EPIG-) EPIGENOMICS AG.
XX
XX PI Olek A, Piepenbrock C, Berlin K;
XX
XX DR WPI; 2001-657177/75.
XX
XX

```

```

PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 72150; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 2 A; 6 C; 0 G; 4 T; 0 U; 1 Other;
XX
XX Query Match 15.1%; Score 11; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 7.2e+02;
XX Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX Q/ 930 ATCCCTCCTCT 940
XX Db 3 ATCCCTCCTCT 13
XX
XX RESULT 345
XX ABF71906
XX ID ABF71906 standard; DNA; 13 BP.
XX
XX AC ABF71906;
XX
XX DT 22-FEB-2002 (first entry)
XX
XX DE Oligonucleotide SEQ ID NO 171903 for detecting SNP TSC0042851.
XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX OS Homo sapiens.
XX
XX PN WO200177384-A2.
XX
XX PD 18-OCT-2001.
XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX
XX PR 07-APR-2000; 2000DE-01019173.
XX
XX PA (EPIG-) EPIGENOMICS AG.
XX
XX PI Olek A, Piepenbrock C, Berlin K;
XX
XX DR WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 171903; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010

```

```
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 4 A; 0 C; 3 G; 5 T; 0 U; 1 Other;

Query Match          15.1%; Score 11; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 7.2e+02;
Matches 11; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

943 ATTGGTTTAATGT 955
|||||
1 ATAGGTTTAATGY 13

RESULT 346
ABH77164
ABF77164 standard; DNA; 13 BP.
ABP77164;
22-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 177161 for detecting SNP TSC0009928.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB0000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 177161; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligomers are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 3 A; 0 C; 3 G; 6 T; 0 U; 1 Other;

Query Match          15.1%; Score 11; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 7.2e+02;
Matches 11; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

948 TTTAATGTTATCG 960
```

```
Db          |||||
1 TTTAATGTTATGY 13

RESULT 347
ABH47707/C
ABH47707 standard; DNA; 13 BP.
ABH47707;
22-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 247684 for detecting SNP TSC00060535.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB0000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 247684; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligomers are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;

Query Match          15.1%; Score 11; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 7.2e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

945 TCGTTTAATGT 955
|||||
11 TGGTTTAATGT 1

Db          |||||
11 TGGTTTAATGT 1

RESULT 348
ABC93440
ABC93440 standard; DNA; 13 BP.
ABC93440;
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 93457 for detecting SNP TSC0023347.
```

```

XX KW SNP: single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX CS Homo sapiens.
XX PN WO200177384-A2.
XX XX
XX XX 18-OCT-2001.
XX XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX XX
XX PR 07-APR-2000; 2000DE-01019173.
XX XX
XX PA (EPIG-) EPIGENOMICS AG.
XX PT Olek A, Piepenbrock C, Berlin K;
XX PI WPI; 2001-657177/75.
XX DR
XX XX
XX XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX XX
XX PS Claim 1; SEQ ID NO 93457; 29pp + Sequence Listing; German.
XX XX
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX XX
XX SQ Sequence 13 BP; 2 A; 0 C; 3 G; 7 T; 0 U; 1 Other;
XX
Query Match 15.1%; Score 11; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 7.2e+02;
Matches 11; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Cy 946 GGTTAATGATGC 958
Db 1 GGTTAATGTTT 13
|||||
|:

RESULT 349
ABF77165/C
ID ABF77165 standard; DNA; 13 BP.
XX
XX AC ABF77165;
XX XX
XX DT 22-FEB-2002 (first entry)
XX XX
XX DE Oligonucleotide SEQ ID NO 177162 for detecting SNP TSC0009928.
XX KW SNP: single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX CS Homo sapiens.
XX XX
XX PN WO200177384-A2.
XX XX
XX XX 18-OCT-2001.
XX XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX XX
XX PS Claim 1; SEQ ID NO 177162; 29pp + Sequence Listing; German.
XX XX
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX XX
XX SQ Sequence 13 BP; 2 A; 0 C; 3 G; 7 T; 0 U; 1 Other;
XX
Query Match 15.1%; Score 11; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 7.2e+02;
Matches 11; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Cy 946 GGTTAATGATGC 958
Db 1 GGTTAATGTTT 13
|||||
|:

RESULT 349
ABF77165/C
ID ABF77165 standard; DNA; 13 BP.
XX
XX AC ABF77165;
XX XX
XX DT 22-FEB-2002 (first entry)
XX XX
XX DE Oligonucleotide SEQ ID NO 177162 for detecting SNP TSC0009928.
XX KW SNP: single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX CS Homo sapiens.
XX XX
XX PN WO200177384-A2.
XX XX
XX XX 18-OCT-2001.
XX XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX XX
XX PS Claim 1; SEQ ID NO 177162; 29pp + Sequence Listing; German.
XX XX
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX XX
XX SQ Sequence 13 BP; 6 A; 3 C; 0 G; 3 T; 0 U; 1 Other;
XX
Query Match 15.1%; Score 11; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 7.2e+02;
Matches 11; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Cy 948 TTTAATGATGCG 960
Db 13 TTTAATGATGGY 1
|||||
|:

RESULT 350
ABH12112
ID ABH12112 standard; DNA; 13 BP.
XX
XX AC ABH12112;
XX XX
XX DT 22-FEB-2002 (first entry)
XX XX
XX DE Oligonucleotide SEQ ID NO 212089 for detecting SNP TSC0051687.
XX KW SNP: single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX XX
XX PN WO200177384-A2.
XX XX
XX XX 18-OCT-2001.
XX XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX XX
XX PR 07-APR-2000; 2000DE-01019173.
XX XX
XX PA (EPIG-) EPIGENOMICS AG.
XX XX
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX XX
XX XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX XX
XX PS Claim 1; SEQ ID NO 212089; 29pp + Sequence Listing; German.
XX XX

```

XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 2 A; 0 C; 3 G; 7 T; 0 U; 1 Other;

XX Query Match 15.1%; Score 11; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 7.2e+02;
XX Matches 11; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

XX 943 ATTGGTTTAATGT 955

XX ||||| |||||
XX 1 ATTGGTTTATGT 13

XX RESULT 351

XX IF48209/c
XX ABF48209 standard; DNA; 13 BP.

XX ABF48209;

XX 21-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 148206 for detecting SNP TSC0037419.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

XX Claim 1; SEQ ID NO 148206; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

XX

SQ Sequence 13 BP; 8 A; 2 C; 0 G; 3 T; 0 U; 0 Other;

XX Query Match 15.1%; Score 11; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 7.2e+02;
XX Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 947 GTTTAATGTAT 957

Db 13 GTTTAATGTAT 3

XX RESULT 352

XX ABH47706

XX ABH47706 standard; DNA; 13 BP.

XX ABH47706;

XX 22-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 247683 for detecting SNP TSC0060535.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

XX Claim 1; SEQ ID NO 247683; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;

XX Query Match 15.1%; Score 11; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 7.2e+02;
XX Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 945 TGGTTTAATGT 955

Db 3 TGGTTTAATGT 13

XX RESULT 353

WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
Claim 1; SEQ ID NO 197139; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 3 A; 0 C; 4 G; 6 T; 0 U; 0 Other;
Query Match 15.1%; Score 11; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 7.2e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
944 TTGGTTTAATG 954
|||||||
2 TTGGTTTAATG 12
SULT 356
F43208
ABF48208 standard; DNA; 13 BP.
ABF48208;
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 148205 for detecting SNP TSC0037419.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
Claim 1; SEQ ID NO 148205; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a

range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF99989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 U; 0 Other;
Query Match 15.1%; Score 11; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 7.2e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
947 GTTTAATGTAT 957
|||||||
1 GTTTAATGTAT 11
RESULT 357
ABF78023/c
ID ABF78023 standard; DNA; 13 BP.
XX AC ABF78023;
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 178020 for detecting SNP TSC0044112.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
PI Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
XX Claim 1; SEQ ID NO 178020; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF99989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 6 A; 2 C; 0 G; 4 T; 0 U; 1 Other;
Query Match 15.1%; Score 11; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 7.2e+02;


```

Matches 11; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Q7 948 TTTAATGATATGCG 960
Db 13 TTTAATGATATAGY 1

RESULT 358
ABH16023/c
ID ABH16023 standard; DNA; 13 BP.
XX AC ABH16023;
XX DT 22-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 216000 for detecting SNP TSC0052522.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX PS WPI; 2001-657177/75.
XX DR
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX PS Claim 1; SEQ ID NO 216000; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABK00010-ABK99989
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 7 A; 2 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 15.1%; Score 11; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 7.2e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 943 ATTGGTTTAAAT 953
Db 13 ATTGGTTTAAAT 3

RESULT 359
AAF48242
ID AAF48242 standard; DNA; 15 BP.
XX AC AAF48242;
XX DT 30-MAR-2001 (first entry)
XX DE IGFBP3 oligonucleotide #1657.
XX
```

```

DT 30-MAR-2001 (first entry)
XX IGFBP3 oligonucleotide #1662.
XX KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
XX KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
XX KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
XX KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
XX KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
XX KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
XX KW hyperneovascular condition; hyperplasia; kidney disease;
XX KW neovascular condition of the retina; ss.
XX OS Homo sapiens.
XX PN WO200078341-A1.
XX PD 28-DEC-2000.
XX PF 21-JUN-2000; 2000WO-AU000693.
XX PR 21-JUN-1999; 99US-0140345P.
XX PA (MURD-) MURDOCH CHILDRENS RES INST.
XX PI Wraight CJ, Werther GA, Edmondson SR;
XX PS WPI; 2001-041421/05.
XX DR
XX PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering
XX PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
XX PT inhibits or reduces growth factor mediated cell proliferation and/or
XX PT inflammation.
XX PS Example 7; Page 55; 201pp; English.
XX CC The present invention relates to a method for ameliorating the effects of
XX CC skin disorders. The method comprises contacting the skin with an
XX CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
XX CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
XX CC inhibiting or reducing growth factor mediated cell proliferation,
XX CC inflammation and/or other disorders. The present sequence is an
XX CC oligonucleotide which can be used to design the antisense
XX CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
XX CC F45161). The method is useful for ameliorating the effects of psoriasis,
XX CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
XX CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
XX CC hyperneovascular condition such as a neovascular condition of the retina,
XX CC brain or skin, growth factor-mediated malignancies, other sclerotic
XX CC disease, kidney disease, hyperproliferation of the inside of blood
XX CC vessels or any other hyperplasia
XX SQ Sequence 15 BP; 3 A; 6 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 15.1%; Score 11; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 7.9e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 933 CCTCCTCTTCA 943
Db 1 CCTCCTCTTCA 11

RESULT 360
AAF48237
ID AAF48237 standard; DNA; 15 BP.
XX AC AAF48237;
XX DT 30-MAR-2001 (first entry)
XX DE IGFBP3 oligonucleotide #1657.
XX
```

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
 cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
 skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;
 IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
 growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
 keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
 hyperneovascular condition; hyperplasia; kidney disease;
 neovascular condition of the retina; ss.

Homo sapiens.

WO200078341-A1.

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693.

21-JUN-1999; 99US-0140345P.

(MURD-) MURDOCH CHILDRENS RES INST.

Wright CJ, Werther GA, Edmondson SR;

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering
 UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
 inhibits or reduces growth factor mediated cell proliferation and/or
 inflammation.

Example 7; Page 55; 201pp; English.

The present invention relates to a method for ameliorating the effects of
 skin disorders. The method comprises contacting the skin with an
 antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
 inhibiting or reducing growth factor mediated cell proliferation,
 inflammation and/or other disorders. The present sequence is an
 oligonucleotide which can be used to design the antisense
 oligonucleotides of the present invention (see AAF45151 and AAF45153-
 F45161). The method is useful for ameliorating the effects of psoriasis,
 ichthyosis, ptyriasis, ruba, pilaris, serborrhea, keloids, keratosis,
 neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
 hyperneovascular condition such as a neovascular condition of the retina,
 brain or skin, growth factor-mediated malignancies, other sclerotic
 disease, kidney disease, hyperproliferation of the inside of blood
 vessels or any other hyperplasia

Sequence 15 BP; 0 A; 8 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 15.1%; Score 11; DB 1; Length 15;
 Best Local Similarity 100.0%; Pred. No. 7.9e+02;
 Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

932 CCTCTCTCTC 942
 |||||
 5 CCTCTCTCTC 15

RESULT 361

AS95645/c

AAS95645 standard; DNA; 15 BP.

AAS95645;

14-FEB-2002 (first entry)

Human NPY1R gene allele-specific oligonucleotide sequencing primer #6.

Human; neuropeptide Y receptor Y1; NPY1R; ss; antiarteriosclerotic;
 haplotyping; haplotype pair; single nucleotide polymorphism; genotyping;
 gene therapy; drug screening; cardiovascular disease; antidepressant;
 hypertension; cardiant; depression; probe; sequencing primer; PCR primer;

KW PCR primer universal tail.

XX Homo sapiens.

OS WO200185742-A2.

FN 15-NOV-2001.

XX 07-MAY-2001; 2001WO-US014773.

XX 05-MAY-2000; 2000US-0201950P.

XX (GENA-) GENAISSANCE PHARM INC.

XX Choi JY, Kliehm SE, Koshy B, Lee HH;

XX WPI; 2002-055579/07.

XX New isolated polynucleotide variant of neuropeptide Y receptor Y1 (NPY1R)
 PT for studying the function of NPY1R, and expressing NPY1R protein for use
 PT in screening candidate drugs to treat NPY1R-related diseases.

XX Claim 15; Page 12; 48pp; English.

XX The invention relates to single nucleotide polymorphisms in the human
 CC neuropeptide Y receptor Y1 (NPY1R) gene. A method for haplotyping the
 CC NPY1R gene in an individual comprises identifying the nucleotide at one
 CC or more polymorphic sites and determining whether one of the copies of
 CC the gene is defined by one of the NPY1R haplotypes given in the
 CC specification or whether both copies are defined by a haplotype pair.
 CC This method is useful in genotyping, whereby all possible haplotype pairs
 CC can be assigned to specific genotypes. An association between a trait and
 CC a haplotype or haplotype pair of the NPY1R gene can be identified by
 CC comparing the frequency of the haplotype or haplotype pair in a
 CC population exhibiting the trait with the frequency of the haplotype or
 CC haplotype pair in a reference population, where a higher haplotype
 CC frequency in the trait population indicates the trait is associated with
 CC the haplotype or haplotype pair. NPY1R and its corresponding DNA are used
 CC for studying the expression and function of NPY1R, for use in screening
 CC for candidate drugs to treat diseases related to NPY1R activity, such as
 CC cardiovascular diseases (e.g. hypertension) and depression. The sequences
 CC are also useful for studying the effect of variation on the biological
 CC activity of NPY1R as well as on the binding affinity of candidate drugs
 CC targeting NPY1R. Sequences AAS95637-AAS95659 represent allele-specific
 CC oligonucleotide probes, sequencing primers, PCR primers and PCR primer
 CC universal tails used to detect NPY1R gene polymorphisms

XX Sequence 15 BP; 7 A; 1 C; 6 G; 0 T; 0 U; 1 Other;

Query Match 15.1%; Score 11; DB 1; Length 15;
 Best Local Similarity 100.0%; Pred. No. 7.9e+02;
 Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 918 TCTTGCCTTT 928
 |||||
 Db 13 TCTTGCCTTT 3

RESULT 362

ABK81922/c

ID ABK81922 standard; DNA; 15 BP.

XX ABK81922;

XX 13-AUG-2002 (first entry)

XX Human CYP27A1 gene polymorphism detection ASO primer #20.

XX Human; Cytochrome P450; Subfamily XXVIIA; single nucleotide polymorphism;
 KW Steroid 27-Hydroxylase; Cerebrotendinous Xanthomatosis Polypeptide 1;
 KW CYP27A1; SNP; drug screening; cerebrotendinous xanthomatosis;
 KW allele specific oligonucleotide; ASO; primer; ss.

XX

OS Homo sapiens.
 XX
 PN W0200230952-A2.
 XX
 PD 18-APR-2002.
 XX
 PF 15-OCT-2001; 2001WO-US042727.
 XX
 PR 13-OCT-2000; 2000US-0239942P.
 XX
 PA (GENA-) GENAISSANCE PHARM INC.
 XX
 PI Anastasio AE, Chew A, Han J, Sanchis A;
 XX
 DR WPI; 2002-435436/46.
 XX
 PT Novel isolated human Cytochrome P450, Subfamily XXVIIA, Steroid 27-
 PT Hydroxylase, Cerebrotendinous Xanthomatosis 1 gene, useful for
 PT therapeutic purposes, and for studying expression and function of the
 PT gene.
 XX
 PS Claim 14; Page 14; 90pp; English.
 XX
 CC The present invention relates to a new human Cytochrome P450, Subfamily
 CC XXVIIA, (Steroid 27-Hydroxylase, Cerebrotendinous Xanthomatosis)
 CC Polypeptide 1 (CYP27A1) polynucleotide. The polynucleotide of the
 CC invention comprises a sequence which is a polymorphic variant for a
 CC reference sequence for the CYP27A1 gene or its fragment, or a polymorphic
 CC variant of a reference sequence for a CYP27A1 cDNA or its fragment. The
 CC invention is useful for screening for drugs by contacting the CYP27A1
 CC polymorphic variant with a candidate agent and assaying for binding
 CC activity. The invention is also useful in studying the expression and
 CC function of CYP27A1, and in expressing CYP27A1 protein for use in
 CC screening for candidate drugs to treat diseases related to CYP27A1
 CC activity, e.g. cerebrotendinous xanthomatosis. Other uses include for
 CC therapeutic purposes and for studying expression of the CYP27A1 isogenes
 CC in vivo, for in vivo screening and testing of drugs targeted against
 CC CYP27A1 protein, and for testing the efficacy of therapeutic agents and
 CC compounds for diseases associated with CYP27A1 activity, e.g.
 CC cerebrotendinous xanthomatosis, in a biological system. The invention is
 CC useful for studying the effect of the variation on the biological
 CC activity of CYP27A1 as well as on the binding affinity of candidate drugs
 CC targeting CYP27A1 for the treatment of cerebrotendinous xanthomatosis.
 CC The present nucleic acid sequence represents one of a collection
 CC (ABK81903-ABK81930) of allele specific oligonucleotide (ASO) primers that
 CC were used in the invention to detect polymorphisms in the human CYP27A1
 CC gene
 XX
 SQ Sequence 15 BP; 5 A; 0 C; 6 G; 3 T; 0 U; 1 Other;
 Query Match 15.1%; Score 11; DB 1; Length 15;
 Best Local Similarity 84.6%; Pred. No. 7.9e+02;
 Matches 11; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
 QY 924 CCTTTATCCCTC 936
 :|| |||||
 Db 14 YCATATATCCCTC 2
 RESULT 363
 AAQ68033
 ID AAQ68033 standard; DNA; 16 BP.
 XX
 AC AAQ68033;
 XX
 DT 25-MAR-2003 (revised)
 DT 16-DEC-1994 (first entry)
 XX
 DE Probe for HCV genotyping (HCV 2, subtype 2c).
 XX
 KW Hepatitis C virus; HCV; probe; genotyping; hybridisation;
 KW non-A, non-B hepatitis; NANBH; ss.
 XX

OS Synthetic.
 XX
 PN W09412670-A2.
 XX
 PD 09-JUN-1994.
 XX
 PF 26-NOV-1993; 93WO-EP003325.
 XX
 PR 27-NOV-1992; 92EP-00403222.
 PR 31-AUG-1993; 93EP-00402129.
 XX
 PA (INNO-) INNOGENETICS NV SA.
 XX
 PI Maertens G, Stuyver L, Rossau R, Van Heuverswyn H;
 XX
 DR WPI; 1994-200296/24.
 XX
 PT Process for genotyping Hepatitis C virus (HCV) isolates - utilises probes
 PT hybridising to HCV isolate domains.
 XX
 PS Claim 6; Page 67; 96pp; English.
 XX
 CC Genotyping HCV utilises probes hybridising to HCV isolate domains. HCV
 CC types 2, 3, 4, 5 or 6 and subtypes 1a, 1b, 2a, 2b, 3a, 3b, 3c, 4a, 4b,
 CC 4c, 4d, 4e, 4f, 4g and 4h can be typed. (Updated on 25-MAR-2003 to
 CC correct PN field.)
 XX
 SQ Sequence 16 BP; 1 A; 3 C; 6 G; 6 T; 0 U; 0 Other;
 Query Match 15.1%; Score 11; DB 1; Length 16;
 Best Local Similarity 100.0%; Pred. No. 8.2e+02;
 Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 900 CCTGGTCATTT 910
 |||||
 Db 3 CCTGGTCATTT 13
 RESULT 364
 AAQ10578
 ID AAQ10578 standard; DNA; 14 BP.
 XX
 AC AAQ10578;
 XX
 DT 10-MAY-1991 (first entry)
 XX
 DE Probe for detecting human factor IX encoding plasmid clone.
 XX
 KW Human factor IX; genetic deficiencies; blood clotting disorders;
 KW haemophilia B; ss.
 XX
 OS Homo sapiens.
 XX
 PN US4994371-A.
 XX
 PD 19-FEB-1991.
 XX
 PF 19-MAY-1989; 89US-00355900.
 XX
 PR 16-MAY-1985; 85US-00735702.
 PR 18-JUL-1986; 86US-00888041.
 PR 28-AUG-1987; 87US-00094031.
 XX
 PA (DAVI/) DAVIE E W.
 XX
 PI Davie EW, Kurachi K;
 XX
 DR WPI; 1991-072901/10.
 XX
 PT DNA coding for human factor IX - used for producing polypeptide and
 PT detecting genetic modifications in diagnosing blood clotting
 PT deficiencies.
 XX

Disclosure; Page 7; 12pp; English.

This probe is used to screen a human liver cDNA library for the presence of a clone (pHFX1) contg. the coding information for human factor IX. The recombinant DNA clone is useful for detecting mutations or other genetic deficiencies concerned with factor IX. It can also be used to diagnose blood clotting deficiencies e.g. haemophilia B. The use of recombinant DNA methods results in the large scale expression of hFIX polypeptides. See also AAQ10577 and AAQ10579

Sequence 14 BP; 2 A; 3 C; 1 G; 8 T; 0 U; 0 Other;

Query Match 14.8%; Score 10.8; DB 1; Length 14;
Best Local Similarity 85.7%; Pred. No. 8.1e+02;
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

918 TCTTTGCCCTTTTAT 931
|||||||
1 TATTTCCTTCAT 14

RESULT 365
AAV65725 standard; DNA; 14 BP.

AAV65725;

10-DEC-1998 (first entry)

Oligonucleotide used in the course of the invention.

Werner's syndrome; diagnosis; ss.

Synthetic.

JPI0201498-A.

04-AUG-1998.

24-JAN-1997; 97JP-00011268.

24-JAN-1997; 97JP-00011268.

(EIJU-) EIJIN KENKYUSHO KK.

WPI; 1998-474499/41.

Detection of mutation in gene causing human Werner's syndrome - and oligo:nucleotide used for detection, comprises amplifying DNA and synthesising oligo:nucleotide.

Claim 7; Page 9; 17pp; Japanese.

Oligonucleotides AAV65723-25 are used in the course of the invention. The specification describes the detection of a mutation in a gene causing human Werner's syndrome. The method comprises amplifying a DNA fragment containing a mutation at position 733, 734, 1620 or 4146 of AAV65701 or at position 42 of AAV65702 and synthesising an oligonucleotide so that the base at the above site comes to be the 3' end based on the base sequence of AAV65701-02, or an oligonucleotide in which the base adjacent to the 3' end comes to be the 5' end. The oligonucleotides are hybridised with the resultant amplified fragment. The method can be used to diagnose Werner's syndrome

Sequence 14 BP; 0 A; 1 C; 1 G; 12 T; 0 U; 0 Other;

Query Match 14.8%; Score 10.8; DB 1; Length 14;
Best Local Similarity 85.7%; Pred. No. 8.1e+02;
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

909 TTTCTTTGGTCTTT 922
|||||||
1 TTTCTTTGTTTTT 14

RESULT 366
AAV48874 standard; DNA; 14 BP.

AAV48874;

15-OCT-1998 (first entry)

ErbB-2 gene antisense oligonucleotide ErbB-2-N-83.

ErbB-2; antisense oligonucleotide; modulate; gene expression; ss.

Synthetic.

Homo sapiens.

EP856579-A1.

05-AUG-1998.

31-JAN-1997; 97EP-00101531.

31-JAN-1997; 97EP-00101531.

(BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.

Schlingensiepen K, Brysch W;

WPI; 1998-400910/35.

Preparation of antisense oligo:nucleotide(s) which lack long runs of consecutive guanosine or inosine - and have specific ratio of residues able to form two or three hydrogen bonds, have greater activity and reduced toxicity, used therapeutically or to modulate growth of cells in culture.

Example 4; Fig 6d; 286pp; English.

AAV48709-886 represent antisense oligonucleotides directed against the ErbB-2 gene. Of these, only oligonucleotides AAV48709-91 resulted in significant reduction in ErbB-2 protein expression, while oligonucleotides AAV48792-886 had little effect. The oligonucleotides exemplify the invention. The specification describes oligonucleotides that contain 8-30 nucleotides, which contain at most 8 nucleotides that can each form three hydrogen bonds to cytosine; do not contain four consecutive nucleotides able to form three H-bonds each to four consecutive cytosines; do not contain two sequences of three consecutive nucleotides each able to form three H-bonds to three consecutive cytosines, and the ratio between residues able to form two H-bonds each (2R) or three such bonds (3R) is given by $2R/3R = 0.33-0.72$. The oligonucleotides are used to modulate expression of genes, particularly the genes for p53, ErbB-2, junB, junD, TGF-beta 1 or beta 2 to control proliferation of primary cell cultures (e.g. bone marrow stem, liver or kidney cells, osteoclasts, osteoblasts and/or keratinocytes). The oligonucleotides can also be used to analyse function of proteins (by altering their expression or activity) and therapeutically, e.g. in cases of cancer or (targeting TGF) for stimulating the immune system

Sequence 14 BP; 1 A; 2 C; 1 G; 10 T; 0 U; 0 Other;

Query Match 14.8%; Score 10.8; DB 1; Length 14;
Best Local Similarity 85.7%; Pred. No. 8.1e+02;
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

909 TTTCTTTGGTCTTT 922
|||||||
1 TTTATTGCTCTTT 14

RESULT 367
AAQ55453/C standard; DNA; 15 BP.

|| ||| |||||
15 TTAGTTAAATGTAT 2

RESULT 369
TS57036/c
AAT57036 standard; RNA; 15 BP.
AAT57036;
27-AUG-2003 (revised)
25-MAR-2003 (revised)
24-APR-1997 (first entry)
RSV 1C hammerhead ribozyme target sequence (nt. position 164).
Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
intercellular adhesion molecule; rel A; tumour necrosis factor;
TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
translocation; chronic myelogenous leukaemia; CML; cancer;
Philadelphia chromosome; inflammation; autoimmune disease;
atherosclerosis; myocardial infarction; stroke; restenosis;
transplant rejection; rheumatoid arthritis; psoriasis;
myocardial ischaemia; Kawasaki disease; septic shock; HIV;
human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
ss.
Respiratory syncytial virus.
WO523225-A2.
31-AUG-1995.
23-FEB-1995; 95WO-IB000156.
23-FEB-1994; 94US-00201109.
29-MAR-1994; 94US-00218934.
04-APR-1994; 94US-00222795.
07-APR-1994; 94US-00224483.
15-APR-1994; 94US-00227958.
15-APR-1994; 94US-00228041.
18-MAY-1994; 94US-00245736.
06-JUL-1994; 94US-00271280.
15-AUG-1994; 94US-00291932.
16-AUG-1994; 94US-00291433.
17-AUG-1994; 94US-00292620.
19-AUG-1994; 94US-00293520.
02-SEP-1994; 94US-00300000.
08-SEP-1994; 94US-00303039.
23-SEP-1994; 94US-00311486.
23-SEP-1994; 94US-00311749.
28-SEP-1994; 94US-00314397.
03-OCT-1994; 94US-00316771.
07-OCT-1994; 94US-00319492.
11-OCT-1994; 94US-00321993.
04-NOV-1994; 94US-00334847.
10-NOV-1994; 94US-00337608.
28-NOV-1994; 94US-00345516.
16-DEC-1994; 94US-00357577.
23-DEC-1994; 94US-00363233.
30-JAN-1995; 95US-00380734.
(RIBO-) RIBOZYME PHARM INC.
Stinchcomb DT, Chowira B, Direnzo A, Draper KG, Dudycz LW;
Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
Modak A, Pavco P, Beigelman L, Sullivan SM, Sweedler D, Thompson JD;
Tracz D, Usman N, Wincott FE, Woolf T;
WPI; 1995-351090/45.
Ribozymes having modified bases and methods for producing them - for use

PT in inhibiting disease related genes.
XX
PS Claim 2; Page 269; 407pp; English.
XX
CC The present sequence represents a preferred target sequence for an
CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves mRNA coding for a
CC protein of respiratory syncytial virus (RSV) at the nucleotide base
CC position indicated in the DE line. Regions of the mRNA that do not form
CC secondary folding structures and that contain potential hammerhead and
CC hairpin ribozyme cleavage sites were identified by computer analysis.
CC Ribozymes directed against these mRNA sequences were designed and
CC synthesised with modifications that improve their nuclease resistance.
CC The ribozymes cleave the target sequences and can be used for treatment
CC and diagnosis of RSV infection. (Updated on 25-MAR-2003 to correct PI
CC field.) (Updated on 27-AUG-2003 to correct OS field.)
XX
SQ Sequence 15 BP; 7 A; 3 C; 0 G; 0 T; 5 U; 0 Other;
Query Match 14.8%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 8.5e+02;
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 944 TTGGTTTAAATGTAT 957
DB 14 TTAGTTAAATGTAT 1
RESULT 370
AAX64777
ID AAX64777 standard; RNA; 15 BP.
XX
AC AAX64777;
XX
DT 20-JUL-1999 (first entry)
XX
DE Human B7-1 hammerhead ribozyme target SEQ ID NO:1409.
XX
KW Arthritic condition; graft tolerance; immune response; target; cleavage;
KW hammerhead ribozyme; hairpin ribozyme; human; rabbit; mouse; collagenase;
KW streptolysin; synovial membrane; joint; arthritis; osteoarthritis;
KW rheumatoid arthritis; autoimmune disease; allergy; inflammation;
KW diagnosis; ss.
XX
OS Homo sapiens.
XX
PN WO9618736-A2.
XX
PD 20-JUN-1996.
XX
PF 22-NOV-1995; 95WO-US015516.
XX
PR 13-DEC-1994; 94US-00354920.
PR 23-DEC-1994; 94US-00363253.
PR 23-DEC-1994; 94US-00363254.
PR 17-FEB-1995; 95US-00390850.
PR 20-APR-1995; 95US-00426124.
PR 02-MAY-1995; 95US-00432874.
PR 04-MAY-1995; 95US-00434509.
PR 07-JUL-1995; 95US-0000951P.
PR 07-JUL-1995; 95US-0000974P.
PR 07-AUG-1995; 95US-00512861.
PR 05-OCT-1995; 95US-00541365.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Beigelman L, Stinchcomb DT, Jarvis T, Draper K, Pavco P;
PI Mcswiggen J, Gustofson J, Usman N, Wincott F, Matulic-Adamic J;
PI Karpeisky A, Thompson JD, Modak A, Burgin A;
XX
XX WPI; 1996-300653/30.
XX
XX Enzymatic nucleic acid molecules having a hammer-head motif - used for
PT the treatment of arthritis, induction of graft tolerance or treatment of

```

PT auto-immune diseases.
FS Claim 10; Page 168; 307pp; English.
XX
CC The present invention describes a novel enzymatic nucleic acid (ENA)
CC having a hammerhead motif (HM) comprising: (i) at least 5 ribose residues
CC ; (ii) a 2'-C-allyl modification at position 4 of the ENA; (iii) at least
CC ten 2'-O-methyl modifications; and (iv) a 3'-end modification. The ENA's
CC can inhibit collagenase and stromelysin production in the synovial
CC membrane of joints for the treatment or prevention of arthritis,
CC particularly osteoarthritis or rheumatoid arthritis. The ENA's can also
CC be used to treat antigen presenting cells of a donor to induce tolerance
CC in a recipient to an alloantigen of a donor. They can also be used for
CC enhancing graft tolerance or for treating autoimmune disease, and for
CC treating allergies and other inflammatory conditions. The ENA's can also
CC be used in diagnosis. Ribozyme therapy impacts on the expression of
CC stromelysin without introducing the non-specific effects upon gene
CC expression which accompany treatment with retinoids and dexamethasone.
CC The concentration of ribozyme required to affect a therapeutic treatment
CC is lower than that required of antisense molecules, and is highly
CC specific. The present sequence is used in the exemplification of the
CC present invention
XX
SQ Sequence 15 BP; 5 A; 1 C; 2 G; 0 T; 7 U; 0 Other;
Query Match 14.8%; Score 10.8; DB 1; Length 15;
Best Local Similarity 42.9%; Pred. No. 8.5e+02;
Matches 6; Conservative 6; Mismatches 2; Indels 0; Gaps 0;
QY 943 ATTGGTTTAAATGA 956
| : : : : :
Db 1 AUUUGCUUAUGUA 14
RESULT 371
AAV93860
ID AAV93860 standard; RNA; 15 BP.
AC AAV93860;
XX
XX
DT 18-FEB-1999 (first entry)
DE Target sequence with sequence homology to c-raf and B-raf position 1603.
XX
XX Human; c-raf; A-raf; B-raf; hammerhead ribozyme; hairpin ribozyme;
XX target; substrate; catalyst; modulation; expression; Raf gene; delivery;
XX screening; identification; synthesis; deprotection; purification; cancer;
XX inflammation; psoriasis; non-hepatic ascites; infection; genetic drift;
XX restenosis; rheumatoid arthritis; ss.
XX
XX Homo sapiens.
XX
XX WO9805030-A2.
XX
XX 12-NOV-1998.
XX
XX 05-MAY-1998; 98WO-US009249.
XX
XX 09-MAY-1997; 97US-0046059P.
XX 09-JUN-1997; 97US-0049002P.
XX 03-JUL-1997; 97US-0051718P.
XX 22-AUG-1997; 97US-0056808P.
XX 02-OCT-1997; 97US-0061321P.
XX 02-OCT-1997; 97US-0061324P.
XX 05-NOV-1997; 97US-0064866P.
XX 19-DEC-1997; 97US-0068212P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Jarvis T, Matulic-Adamic J, Reynolds M, Kisich K, Bellon L;
XX Parry T, Beigelman L, Mowaggen JA, Karpeisky A, Burgin A;
XX Thompson J, Workman CT, Beaudry A, Svedler D;
XX

```

```

DR WPI; 1999-009494/01.
XX
PT Identifying new catalytic nucleic acid that modulates selected processes
PT - especially ribozymes that cleave Raf RNA for treating cancer,
PT restenosis, and also new ribozymes and modified nucleoside triphosphates
XX used as antiviral agents and synthons.
FS Claim 180; Page 177; 259pp; English.
XX
CC A method has been developed for the identification of a nucleic acid
CC capable of modulating a process in a biological system. The method
CC comprises: (a) introducing into the system a random library of nucleic
CC acid catalysts (NAC) having a substrate binding domain (SBD), comprising
CC a random sequence, and a catalytic domain (CD); and (b) identifying NAC
CC in systems where modulation has occurred and/or determining the sequence
CC of at least part of the SBDs in such systems. Nucleic acid molecules with
CC endonuclease activity and catalytic activity, from the present invention,
CC are used to modulate gene expression in plant and mammalian cells and to
CC cleave target nucleic acid, particularly for treating systemic diseases
CC caused by specific RNA, e.g. cancer, inflammation, psoriasis, non-hepatic
CC ascites and infection. They may also be used to detect genetic drift and
CC mutations in diseased cells and to determine c-raf RNA. Specifically NACs
CC with RNA-cleaving activity that modulate expression of the Raf gene, are
CC used to treat cancer, restenosis, psoriasis or rheumatoid arthritis, or
CC generally any condition associated with the level of c-raf. Introduction
CC of sugarphosphate modifications increases stability against nuclease and
CC activity. AAV90922 to AAV93877 represent NACs that can be used in the
CC method, specifically for modulating the expression of a Raf gene
XX
SQ Sequence 15 BP; 2 A; 5 C; 2 G; 0 T; 6 U; 0 Other;
Query Match 14.8%; Score 10.8; DB 1; Length 15;
Best Local Similarity 50.0%; Pred. No. 8.5e+02;
Matches 7; Conservative 5; Mismatches 2; Indels 0; Gaps 0;
QY 933 CCTCCTCTTCATTG 946
| : : : : :
Db 2 CCUACUCUUAUGG 15
RESULT 372
AAV72650/c
ID AAV72650 standard; DNA; 15 BP.
XX
XX AAV72650;
XX
XX 01-DEC-2000 (first entry)
XX
XX Cystic fibrosis gene UDG-digest fragment SEQ ID #7.
XX
XX Uracil DNA glycosylase; UDG; infectious disease detection; cancer;
XX sickle cell anaemia; cystic fibrosis; thalassaemia; muscular dystrophy;
XX Tay-Sachs disease; ss.
XX
XX Synthetic.
XX
XX US6090553-A.
XX
XX 18-JUL-2000.
XX
XX 29-OCT-1997; 97US-00959853.
XX
XX 29-OCT-1997; 97US-00959853.
XX
XX (BECI ) BECKMAN COULTER INC.
XX
XX Matson RS;
XX
XX WPI; 2000-531416/48.
XX
XX Detecting specific nucleic acid sequence in sample containing nucleic
XX acids involves amplifying nucleic acid, cleaving amplified products with
XX uracil-DNA glycosylase to obtain DNA segments and detecting segments.

```

Example 3; Col 17; 21pp; English.

A new method for detecting specific nucleic acid sequences in a sample involves amplifying the nucleic acid sample by PCR and then cleaving the amplified products with uracil DNA glycosylase (UDG), the resulting DNA fragments are detected using reverse blot hybridisation techniques. The method can be used to distinguish between two different sequences, for example for the detection of a DNA fragment carrying a mutation. The method is useful for detecting the presence or absence of a nucleic acid sequence containing a polymorphic restriction site associated with a disease such as cystic fibrosis disease, and may be used for detecting infectious diseases. Genetic disorders such as sickle cell anaemia, cystic fibrosis, alpha or beta thalassaemia, muscular dystrophy, and Tay-Sachs disease may also be detected using the method. Oncogenes such as RAS may also be detected using the method, for the diagnosis of certain cancers. The present sequence represents a fragment of the cystic fibrosis (CF) gene created by UDG cleavage. This sequence is used in an example of the invention and contains the position of a mutation site in the CF gene. This fragment and the corresponding mutant containing fragment (AAAT265L) can be used to produce probes specifically to identify the mutation, which can then be used in the method of the invention

Sequence 15 BP; 9 A; 3 C; 3 G; 0 T; 0 U; 0 Other;

Query Match 14.8%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 8.5e+02;
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

911 TCTTTGGTCTTTC 924
|||||||
15 TCTTTGGTCTTTC 2

RESULT 373
AAAT265L/c
AAAT265L standard; DNA; 15 BP.

AAAT265L;

30-MAR-2001 (first entry)

IGFBP3 oligonucleotide #1044.

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;
IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
hyperneovascular condition; hyperplasia; kidney disease;
neovascular condition of the retina; ss.

Homo sapiens.

WO200078341-A1.

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693.

21-JUN-1999; 99US-0140345P.

(MURD-) MURDOCH CHILDRENS RES INST.

Wright CJ, Werther GA, Edmondson SR;

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or

inflammation.

Example 7; Page 50; 201pp; English.

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAT45151 and AAT45153-P45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, ptyriasis, ruba, pilaris, serborrhea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia

Sequence 15 BP; 6 A; 4 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 14.8%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 8.5e+02;
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 901 CTGTCATTTCTT 914

Db 15 CTGTCATTTCTT 2

RESULT 374

AAAT2177/c

ID AAT2177 standard; DNA; 15 BP.

AAAT2177;

30-MAR-2001 (first entry)

IGF-I oligonucleotide #3137.

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;
IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
hyperneovascular condition; hyperplasia; kidney disease;
neovascular condition of the retina; ss.

Homo sapiens.

WO200078341-A1.

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693.

21-JUN-1999; 99US-0140345P.

(MURD-) MURDOCH CHILDRENS RES INST.

Wright CJ, Werther GA, Edmondson SR;

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 8; Page 81; 201pp; English.

CC The present invention relates to a method for ameliorating the effects of
 CC skin disorders. The method comprises contacting the skin with an
 CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
 CC inhibiting or reducing growth factor mediated cell proliferation,
 CC inflammation and/or other disorders. The present sequence is an
 CC oligonucleotide which can be used to design the antisense
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
 CC F45161). The method is useful for ameliorating the effects of psoriasis,
 CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
 CC hyperneovascular condition such as a neovascular condition of the retina,
 CC disease, kidney disease, hyperproliferation of the inside of blood
 CC vessels or any other hyperplasia
 XX
 SQ Sequence 15 BP; 7 A; 3 C; 2 G; 3 T; 0 U; 0 Other;

Query Match 14.8%; Score 10.8; DB 1; Length 15;
 Best Local Similarity 85.7%; Pred. No. 8.5e+02;
 Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 941 TCATTGGTTTAATG 954
 |||||
 Db 15 TCACTGTTTAATG 2

RESULT 375
 AAF53514
 ID AAF53514 standard; DNA; 15 BP.
 XX
 AC AAF53514;
 XX
 DT 30-MAR-2001 (first entry)
 XX
 DE IGF-I oligonucleotide #4474.
 XX
 KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
 KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
 KW hyperneovascular condition; hyperplasia; kidney disease;
 KW neovascular condition of the retina; ss.

OS Homo sapiens.
 XX WO200078341-A1.
 XX 28-DEC-2000.
 XX 21-JUN-2000; 2000WO-AU000693.
 XX 21-JUN-1999; 99US-0140345P.
 XX (MURD-) MURDOCH CHILDRENS RES INST.
 XX Wraight CJ, Werther GA, Edmondson SR;
 XX WPI; 2001-041421/05.
 XX
 XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering
 XX UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
 XX inhibits or reduces growth factor mediated cell proliferation and/or
 XX inflammation.
 XX
 XX Example 8; Page 90; 201pp; English.

CC The present invention relates to a method for ameliorating the effects of
 CC skin disorders. The method comprises contacting the skin with an
 CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
 CC inhibiting or reducing growth factor mediated cell proliferation,
 CC inflammation and/or other disorders. The present sequence is an
 CC oligonucleotide which can be used to design the antisense
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
 CC F45161). The method is useful for ameliorating the effects of psoriasis,
 CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
 CC hyperneovascular condition such as a neovascular condition of the retina,
 CC disease, kidney disease, hyperproliferation of the inside of blood
 CC vessels or any other hyperplasia
 XX
 SQ Sequence 15 BP; 7 A; 3 C; 2 G; 3 T; 0 U; 0 Other;

CC inhibiting or reducing growth factor mediated cell proliferation,
 CC inflammation and/or other disorders. The present sequence is an
 CC oligonucleotide which can be used to design the antisense
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
 CC F45161). The method is useful for ameliorating the effects of psoriasis,
 CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
 CC hyperneovascular condition such as a neovascular condition of the retina,
 CC disease, kidney disease, hyperproliferation of the inside of blood
 CC vessels or any other hyperplasia
 XX
 SQ Sequence 15 BP; 0 A; 7 C; 0 G; 8 T; 0 U; 0 Other;

Query Match 14.8%; Score 10.8; DB 1; Length 15;
 Best Local Similarity 85.7%; Pred. No. 8.5e+02;
 Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 927 TTTATCCTCTCTCT 940
 |||||
 Db 2 TTTCTCTCTCTCT 15

RESULT 376
 AAF53515
 ID AAF53515 standard; DNA; 15 BP.
 XX
 AC AAF53515;
 XX
 DT 30-MAR-2001 (first entry)
 XX
 DE IGF-I oligonucleotide #4475.
 XX
 KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
 KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
 KW hyperneovascular condition; hyperplasia; kidney disease;
 KW neovascular condition of the retina; ss.

OS Homo sapiens.
 XX WO200078341-A1.
 XX 28-DEC-2000.
 XX 21-JUN-2000; 2000WO-AU000693.
 XX 21-JUN-1999; 99US-0140345P.
 XX (MURD-) MURDOCH CHILDRENS RES INST.
 XX Wraight CJ, Werther GA, Edmondson SR;
 XX WPI; 2001-041421/05.
 XX
 XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering
 XX UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
 XX inhibits or reduces growth factor mediated cell proliferation and/or
 XX inflammation.
 XX
 XX Example 8; Page 90; 201pp; English.

CC The present invention relates to a method for ameliorating the effects of
 CC skin disorders. The method comprises contacting the skin with an
 CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
 CC inhibiting or reducing growth factor mediated cell proliferation,
 CC inflammation and/or other disorders. The present sequence is an
 CC oligonucleotide which can be used to design the antisense
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
 CC F45161). The method is useful for ameliorating the effects of psoriasis,
 CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
 CC hyperneovascular condition such as a neovascular condition of the retina,
 CC disease, kidney disease, hyperproliferation of the inside of blood
 CC vessels or any other hyperplasia
 XX
 SQ Sequence 15 BP; 0 A; 7 C; 0 G; 8 T; 0 U; 0 Other;

F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia

Sequence 15 BP; 0 A; 7 C; 0 G; 8 T; 0 U; 0 Other;

Query Match 14.8%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 8.5e+02;
Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

927 TTTATCCTCTCTCT 940
|||||
1 TTTCTCTCTCTCT 14

RESULT 377
AAF7625/c
AAF7625 standard; DNA; 15 BP.

AAF7625;

30-MAR-2001 (first entry)

IGFBP3 oligonucleotide #1045.

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.

Homo sapiens.

WO200078341-A1.

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693.

21-JUN-1999; 99US-0140345P.

(MURD-) MURDOCH CHILDRENS RES INST.

Wright CJ, Werther GA, Edmondson SR;

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 7; Page 51; 201pp; English.

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina,

CC brain or skin, growth factor-mediated malignancies, other sclerotic
CC disease, kidney disease, hyperproliferation of the inside of blood
CC vessels or any other hyperplasia

XX Sequence 15 BP; 6 A; 4 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 14.8%; Score 10.8; DB 1; Length 15;

Best Local Similarity 85.7%; Pred. No. 8.5e+02;

Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 901 CTGTCATTTTCTT 914
|||||
Db 14 CTGTCATGTCCTT 1

RESULT 378
AAF52179/c
ID AAF52179 standard; DNA; 15 BP.

AAF52179;

30-MAR-2001 (first entry)

IGF-I oligonucleotide #3139.

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.

Homo sapiens.

WO200078341-A1.

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693.

21-JUN-1999; 99US-0140345P.

(MURD-) MURDOCH CHILDRENS RES INST.

Wright CJ, Werther GA, Edmondson SR;

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 8; Page 81; 201pp; English.

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia

```

SQ Sequence 15 BP; 8 A; 2 C; 2 G; 3 T; 0 U; 0 Other;
  Query Match      14.8%; Score 10.8; DB 1; Length 15;
  Best Local Similarity 85.7%; Pred. No. 8.5e+02;
  Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 940 TTCATTGCTTTAAT 932
  ||||| |||||
  14 TTCACGTTTAAAT 1

Do

RESULT 379
AAAF70047
ID AAF70047 standard; DNA; 15 BP.
AC AAF70047;
XX
XX
XX 18-APR-2001 (first entry)
XX
XX Human TNFRSF11B gene ASO probe, SEQ ID NO: 103.
XX
XX Human; TNFRSF11B; osteoclastogenesis inhibitory factor;
KW single nucleotide polymorphism; SNP; osteoclast recruitment;
KW osteoclast function; osteoporosis; metastatic bone disease;
KW Paget's disease; rheumatoid arthritis; periodontal bone disease; ASO;
KW allele-specific oligonucleotide; probe; ss.
XX
OS Homo sapiens.
XX
XX WO200104137-A1.
XX
XX 18-JAN-2001.
XX
XX 10-JUL-2000; 2000WO-USO18803.
XX
XX 09-JUL-1999; 99US-0143020P.
XX (GENA-) GENAISSANCE PHARM INC.
XX
XX Chew A, Denton RR, Duda A, Nandabalan K, Stephens JC;
XX MPI; 2001-147175/15.
XX
XX Human Osteoclastogenesis Inhibitory Factor nucleotides, comprising single
PT nucleotide polymorphisms, useful for studying e.g. osteoporosis, Paget's
PT disease and rheumatoid arthritis.
XX
XX Claim 15; Page 23; 114pp; English.
XX
XX The present sequence is a probe used to detect polymorphisms in the human
CC osteoclastogenesis inhibitory factor (TNFRSF11B). Polynucleotides
CC comprising one or more of twenty four novel single nucleotide
CC polymorphisms in the TNFRSF11B gene have been identified. TNFRSF11B
CC regulate osteoclast recruitment and function. An understanding of
CC variations in the gene should thus be useful in developing new therapies
CC for metabolic disorders caused by abnormal osteoclast recruitment and
CC function such as osteoporosis, metastatic bone disease, Paget's disease,
CC rheumatoid arthritis and periodontal bone disease
XX
SQ Sequence 15 BP; 3 A; 2 C; 2 G; 7 T; 0 U; 0 Other;
  Query Match      14.8%; Score 10.8; DB 1; Length 15;
  Best Local Similarity 85.7%; Pred. No. 8.5e+02;
  Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 919 CTTTGCCTTTTATC 932
  ||||| |||||
  2 CTTTGCACTTTAAG 15

Do

RESULT 380
AAAF70049
ID AAF70049 standard; DNA; 15 BP.
AC AAF70049;
XX
XX
XX 07-OCT-2002 (first entry)
XX
XX ASO probe for platelet activating factor receptor gene.
XX
XX Human; platelet activating factor receptor; PTAFR; isogene; cancer;
KW chromosome 1; inflammatory disease; coronary disease; probe; ss.
XX
XX Homo sapiens.
XX
XX WO200251859-A2.
XX

```

04-JUL-2002.
 05-NOV-2001; 2001WO-US047441.
 03-NOV-2000; 2000US-0245633P.
 (GENA-) GENAISANCE PHARM INC.
 Chew A, Choi JY, Koshy B;
 WPI; 2002-566672/60.
 New genetic variants comprising haplotypes of the human platelet
 Activating Factor Receptor (P2AFR) gene, useful for treating or screening
 drugs for treating e.g. inflammatory diseases, coronary diseases or
 cancer.
 Claim 15; Page 13; 59pp; English.
 The present sequence represents an allele-specific oligonucleotide (ASO)
 probe which is used for detecting polymorphisms in the human platelet
 Activating Factor Receptor (P2AFR) gene. The gene comprises polymorphic
 sites referred to as PS1-5 to designate the order in which they are
 located in the gene. Six isogenes of the P2AFR gene exist. The P2AFR gene
 is located on chromosome 1, and contains 1 exon. Polymorphisms PS3 and
 PS5 have previously been identified. PS3 and PS5 occur in the coding
 region. The polynucleotide comprising polymorphisms in the P2AFR gene is
 useful in screening candidate drugs to treat diseases related to P2AFR
 activity, e.g. inflammatory diseases, coronary diseases or cancer. The
 P2AFR isogenes are especially useful for treating these diseases. The
 methods and haplotypes are useful in improving the efficiency of drug
 discovery and development processes, or for designing clinical trials of
 candidate drugs for treating the specific condition or disease described
 above
 Sequence 15 BP; 0 A; 1 C; 3 G; 10 T; 0 U; 1 Other;
 Query Match 14.8%; Score 10.8; DB 1; Length 15;
 Best Local Similarity 85.7%; Pred. No. 8.5e+02;
 Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 908 TTTCTTTGGTCTT 921
 |||||
 2 TTTTGTGGTCTT 15
 RESULT 382
 ID56140
 ACDS6140 standard; RNA; 15 BP.
 ACDS6140;
 23-SEP-2003 (first entry)
 HBV enzymatic nucleic acid substrate sequence #63.
 Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
 RNA stability; RNA expression; RNA synthesis; antisense;
 enzymatic nucleic acid; hammerhead ribozyme; DNzyme; inozyme; zinzyme;
 ambrzyme; G-cleaver ribozyme; decoy molecule; aptamer;
 HBV reverse transcriptase; Enhancer I region; viral replication;
 degenerative; disease state; HBV infection; HCV infection; cirrhosis;
 liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
 virucide; antiinflammatory; substrate; ss.
 Hepatitis B virus.
 WO200281494-A1.
 17-OCT-2002.
 26-MAR-2002; 2002WO-US009187.

26-MAR-2001; 2001US-00817879.
 08-JUN-2001; 2001US-00877478.
 08-JUN-2001; 2001US-0296876P.
 24-OCT-2001; 2001US-0335059P.
 05-DEC-2001; 2001US-0337055P.
 (RIBO-) RIBOZYME PHARM INC.
 (BLAT/) BLATT L.
 (MACE/) MACEJAK D.
 (MCSW/) MCSWIGGEN J.
 (MORR/) MORRISSEY D.
 (PAVC/) PAVCO P.
 (LEEP/) LEE P.
 (DRAP/) DRAPER K.
 (ROBE/) ROBERTS E.
 Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
 Draper K, Roberts E;
 WPI; 2003-229207/22.
 Novel compound useful for treating cirrhosis, liver failure,
 hepatocellular carcinoma, or condition associated with hepatitis C virus
 infection.
 Example 1; Page 213; 387pp; English.
 The present invention relates to nucleic acid molecules which modulate
 the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
 Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
 and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
 inozymes, zinzymes, ambrzymes, and G-cleaver ribozymes. Also disclosed
 are nucleic acid decoy molecules and aptamers that bind to HBV reverse
 transcriptase and/or HBV reverse transcriptase primer sequences, as well
 as oligonucleotides that specifically bind the Enhancer I region of HBV
 DNA. The nucleic acids may be used to modulate the expression of HBV
 genes and HBV viral replication. Also disclosed is a method for screening
 compounds and/or potential therapies directed against HBV. The compounds
 that modulate the expression and/or replication of HCV. The compounds
 methods of the invention are useful for the treatment of degenerative and
 disease states related to HBV and HCV infection, replication and gene
 expression such as cirrhosis, liver failure, and hepatocellular
 carcinoma. The present sequence represents a substrate for one of the HBV
 enzymatic nucleic acid sequences disclosed in the present invention
 Sequence 15 BP; 2 A; 5 C; 1 G; 0 T; 7 U; 0 Other;
 Query Match 14.8%; Score 10.8; DB 1; Length 15;
 Best Local Similarity 42.9%; Pred. No. 8.5e+02;
 Matches 6; Conservative 6; Mismatches 2; Indels 0; Gaps 0;
 929 TATCCCTCTCTTC 942
 :||:||||:|:|:|
 1 UAUGCCCAUCUUC 14
 RESULT 383
 ID56200
 ACDS6200 standard; RNA; 15 BP.
 ACDS6200;
 24-SEP-2003 (first entry)
 HBV enzymatic nucleic acid substrate sequence #89.
 Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
 RNA stability; RNA expression; RNA synthesis; antisense;
 enzymatic nucleic acid; hammerhead ribozyme; DNzyme; inozyme; zinzyme;
 ambrzyme; G-cleaver ribozyme; decoy molecule; aptamer;
 HBV reverse transcriptase; Enhancer I region; viral replication;
 degenerative; disease state; HBV infection; HCV infection; cirrhosis;
 liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;

KW virucide; antiinflammatory; substrate; ss.
XX Hepatitis B virus.
CS WO200281494-A1.
XX 17-OCT-2002.
XX
XX
XX 26-MAR-2002; 2002WO-US009187.
XX
XX 26-MAR-2001; 2001US-00817879.
XX 08-JUN-2001; 2001US-00877478.
XX 08-JUN-2001; 2001US-0296876P.
XX 24-OCT-2001; 2001US-0335059P.
XX 05-DEC-2001; 2001US-0337055P.
XX (RIBO-) RIBOZYME PHARM INC.
XX (BLAT/) BLATT L.
XX (MACE/) MACEJAK D.
XX (MCSW/) MCSWIGGEN J.
XX (MORR/) MORRISSEY D.
XX (PAVC/) PAVCO P.
XX (LEBP/) LEE P.
XX (DRAP/) DRAPER K.
XX (ROBE/) ROBERTS E.
XX
XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
XX Draper K, Roberts E;
XX WPI; 2003-229207/22.
XX
XX Novel compound useful for treating cirrhosis, liver failure,
XX hepatocellular carcinoma, or condition associated with hepatitis C virus
XX infection.
XX
XX Example 1; Page 214; 387pp; English.
XX
XX The present invention relates to nucleic acid molecules which modulate
XX the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
XX Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
XX and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
XX inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
XX are nucleic acid decoy molecules and aptamers that bind to HBV reverse
XX transcriptase and/or HBV reverse transcriptase primer sequences, as well
XX as oligonucleotides that specifically bind the Enhancer I region of HBV
XX DNA. The nucleic acids may be used to modulate the expression of HBV
XX genes and HBV viral replication. Also disclosed is a method for screening
XX compounds and/or potential therapies directed against HBV, and compounds
XX that modulate the expression and/or replication of HCV. The compounds and
XX methods of the invention are useful for the treatment of degenerative and
XX disease states related to HBV and HCV infection, replication and gene
XX expression such as cirrhosis, liver failure, and hepatocellular
XX carcinoma. The present sequence represents a substrate for one of the HBV
XX enzymatic nucleic acid sequences disclosed in the present invention
XX
XX Sequence 15 BP; 2 A; 6 C; 1 G; 0 T; 6 U; 0 Other;
XX
XX
XX Query Match 14.8%; Score 10.8; DB 1; Length 15;
XX Best Local Similarity 42.9%; Pred. No. 8.5e+02;
XX Matches 6; Conservative 6; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 929 TATCCCTCCTCTC 942
XX :|:|:|:|:|:|
XX Db 2 UAUGCCUACUUC 15
XX
XX
XX RESULT 384
XX ADC66181
XX ID ADC66181 standard; DNA; 15 BP.
XX AC ADC66181;
XX
XX 18-DEC-2003 (first entry)
XX

XX Human CFTR related oligonucleotide.
XX
XX typing; variable site; cystic fibrosis; human;
XX cystic fibrosis transmembrane conductance regulator; CFTR; ss.
XX
XX Synthetic.
XX Homo sapiens.
XX
XX WO2003074737-A1.
XX 12-SEP-2003.
XX
XX 07-MAR-2003; 2003WO-SE000394.
XX
XX 07-MAR-2002; 2002SE-00000695.
XX (PYRO-) PYROSEQUENCING AB.
XX
XX Schiller A, Dunker J;
XX
XX WPI; 2003-731684/69.
XX
XX Typing at least two variable sites of at least one nucleic acid molecule
XX related to cystic fibrosis by simultaneously or sequentially performing
XX primer extension reactions and determining the pattern of nucleotide
XX incorporation.
XX
XX Example 6; Fig 3; 69pp; English.
XX
XX The present invention describes a method for typing at least two variable
XX sites of at least one nucleic acid molecule related to cystic fibrosis.
XX The method comprises: (a) providing at least one nucleic acid molecule of
XX a gene related to cystic fibrosis; (b) providing at least one extension
XX primer, which binds to different predetermined sites in the nucleic acid
XX molecules, where at least one extension primer is designed to extend over
XX at least two potential variable sites in the nucleic acid molecule, and
XX nucleotide; (c) simultaneously or sequentially performing primer
XX extension reactions; and (d) determining the pattern of nucleotide
XX incorporation to obtain a test pattern; optionally (e) comparing the test
XX pattern of step (c) with one or more reference patterns, in order to type
XX the variable sites of the nucleic acid molecules. Also described: (1)
XX diagnosing the genetic predisposition of states, diseases and drug
XX response related to the human cystic fibrosis transmembrane conductance
XX regulator (CFTR) gene; and (2) a kit for use in the method for typing
XX comprising at least one extension primer. The method is useful for typing
XX at least two variable sites of at least one nucleic acid molecule related
XX to cystic fibrosis. The present sequence represents an oligonucleotide
XX which is used in the exemplification of the present invention.
XX
XX Sequence 15 BP; 2 A; 1 C; 3 G; 9 T; 0 U; 0 Other;
XX
XX Query Match 14.8%; Score 10.8; DB 1; Length 15;
XX Best Local Similarity 85.7%; Pred. No. 8.5e+02;
XX Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 909 TTCTTTGGTCTTT 922
XX | ||||| |||
XX Db 2 TATCTTTGGTCTTT 15
XX
XX
XX RESULT 385
XX ADC66180
XX ID ADC66180 standard; DNA; 15 BP.
XX
XX AC ADC66180;
XX
XX 18-DEC-2003 (first entry)
XX
XX Human CFTR related oligonucleotide.
XX
XX typing; variable site; cystic fibrosis; human;
XX cystic fibrosis transmembrane conductance regulator; CFTR; ss.
XX

FI Anastasio AE, Bieglecki KM, Kliem SE, Koshy B, Kumar AM;
XX WPI; 2002-292071/33.
XX
XX Novel genetic variants of selectin L lymphocyte adhesion molecule 1
FT (SELL) gene useful for therapeutic purposes and for expressing SELL
PT protein useful in identifying drugs to treat whooping cough.
XX
XX Claim 17; Page 14; 137pp; English.
XX
XX The invention relates to an isolated polynucleotide (I) comprising a
CC nucleotide sequence which is a polymorphic variant of a reference
CC sequence for Selectin L Lymphocyte Adhesion Molecule 1 (SELL) gene. SELL
CC polypeptide is useful for screening for drugs targeting the polypeptide.
CC Oligonucleotides derived from (I) are used to target SELL and a haplotype
CC or haplotype pair of SELL gene. These are useful in developing diagnostic
CC tests and therapeutic treatments for neonatal pertussis (whooping cough).
CC (I) is useful for studying the expression and function of SELL and
CC expressing SELL protein for use in screening for candidate drugs to treat
CC diseases related to SELL activity. The polymorphism and haplotype data
CC are useful for validating whether SELL is a suitable target for drugs to
CC treat whooping cough, screening for such drugs and reducing bias in
CC clinical trials of such drugs. Establishing the SELL haplotype or
CC haplotype pair of an individual is useful for improving the efficiency
CC and reliability of several steps in the discovery and development of
CC drugs for treating diseases associated with SELL activity e.g. neonatal
CC pertussis (whooping cough). The haplotyping method is useful to validate
CC SELL as a candidate target for treating a specific condition or disease
CC predicted to be associated with SELL activity. The method is also useful
CC in screening for compounds targeting SELL to treat a specific condition
CC or disease predicted to be associated with SELL activity, e.g. detecting
CC which of the SELL haplotypes or haplotype pairs present in individual
CC members of a population with the specific disease of interest enables one
CC to screen for compounds that display the highest desired agonist or
CC antagonist activity for each of the most frequent SELL isoforms present
CC in the disease population. A polymorphic variant of SELL is useful in
CC studying the effect of the variation on the biological activity of SELL,
CC on the binding affinity of candidate drugs targeting SELL for the
CC treatment of neonatal pertussis (whooping cough) and in assays to measure
CC the binding affinities of one or more candidate drugs targeting the SELL
CC protein. ABK55465-ABK5559 represent SELL gene allele-specific
CC oligonucleotides of the invention
XX
XX Sequence 15 'BP; 2 A; 2 C; 3 G; 7 T; 0 U; 1 Other;
SQ
Query Match 14.5%; Score 10.6; DB 1; Length 15;
Best Local Similarity 90.9%; Pred. No. 9.1e+02;
Matches 10; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
QY 901 CTGTCATTAT 911
Db 4 CTGTCATTAT 14
RESULT 388
AAS98676
ID AAS98676 standard; DNA; 15 BP.
AC AAS98676;
XX
XX 26-MAR-2002 (first entry)
DT
DT Colony stimulating factor 1 receptor (CSF1R) oligonucleotide #42.
DB
XX Colony stimulating factor 1 receptor; CSF1R; polymorphic variant;
KW cytosstatic; gene therapy; malignant histiocytosis; isogene;
KW myeloid malignancy; inflammatory disorder; transgenic animal; haplotype;
KW genotype; human; allele specific oligonucleotide; ASO; probe; ss.
XX
XX Homo sapiens.
OS
XX WO200179225-A2.
PN
XX

PD 25-OCT-2001.
XX
PF 12-APR-2001; 2001WO-US012044.
XX
XX 12-APR-2000; 2000US-0196411P.
PR
XX (GENA-) GENAISSANCE PHARM INC.
PA
XX Chew A, Choi JY, Koshy B;
PI WPI; 2002-075058/10.
XX
XX Novel polymorphic variants of colony stimulating factor 1 receptor useful
PT in studying expression and function of the protein, useful for screening
PT candidate drugs to treat diseases e.g. inflammatory disorders.
XX
XX Claim 15; Page 15; 164pp; English.
PS
XX The invention describes a novel isolated polynucleotide (I) comprising a
CC sequence which is a polymorphic variant (PV) of a reference sequence for
CC colony stimulating factor 1 receptor (CSF1R) gene, found on The
CC polypeptide are useful for improving the discovery and development of
CC drugs for treating diseases associated with CSF1R activity, e.g.,
CC malignant histiocytosis, myeloid malignancies, and inflammatory disorders
CC and the haplotypes can be used to validate CSF1R as a candidate target
CC for treating a specific condition or disease predicted to be associated
CC with CSF1R activity. Genotyping the CSF1R gene of an individual can also
CC be used in developing diagnostic tests and therapeutic treatments. (I) is
CC useful in studying the expression and function of CSF1R, and in
CC expressing CSF1R protein for use in screening for candidate drugs to
CC treat diseases related to CSF1R activity and in studying the effect of
CC the variation on the biological activity of CSF1R as well as on the
CC binding affinity of candidate drugs targeting CSF1R. Antibodies are
CC useful in a variety of diagnostic and prognostic formats and therapeutic
CC methods. A transgenic animal is useful in studying expression of the
CC CSF1R isogenes in vivo, for in vivo screening and testing of drugs
CC targeted against CSF1R protein, and for testing the efficacy of
CC therapeutic agents and compounds. Allele specific oligonucleotides (ASO)
CC are useful as probes and primers, and for assaying a polymorphism in the
CC target region. Without requiring any a priori knowledge of the phenotypic
CC effect of any particular CSF1R or haplotype the invention provides a
CC method for identifying lead compounds that are more likely to show
CC efficacy in clinical trials. This sequence is an allele specific
CC oligonucleotide probe used for detecting CSF1R gene polymorphisms,
CC described in the method of the invention
XX
XX Sequence 15 BP; 1 A; 8 C; 0 G; 5 T; 0 U; 1 Other;
SQ
Query Match 14.5%; Score 10.6; DB 1; Length 15;
Best Local Similarity 90.9%; Pred. No. 9.1e+02;
Matches 10; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
QY 930 ATCCCTCCTCT 940
Db 2 ATCCCTCCTCT 12
RESULT 389
AAX14698/c
ID AAX14698 standard; DNA; 12 BP.
XX
XX AAX14698;
AC
XX 24-MAR-1999 (first entry)
DT
XX Triple helix forming nucleotides 2236-2247 of retinoblastoma gene.
DE
XX Triple-helix forming region; Triplex formation; DNA detection;
KW identification; bacteria; oncogene; virus; ds.
XX
XX Homo sapiens.
OS
XX US5861244-A.
PN

```

19-JAN-1999.
22-DEC-1993; 93US-00173489.
29-OCT-1992; 92US-00968436.
(PROF-) PROFILE DIAGNOSTIC SCI INC.
Hepburn AG, Wang C;
WPI; 1999-130384/11.
Assay of genetic sequences based on triplex formation from double
stranded analyte - and hybrid of anchor and reporter sequences, with
reporter released if triplex formation occurs, used e.g. to identify
bacteria.
Disclosure; Col 15-16; 168pp; English.
The present sequence represents a potential triple-helix forming region.
It can be used to demonstrate the assay of the invention. The assay
comprises adding a sample containing double-stranded DNA test sequences,
e.g. containing the present sequence, to an aqueous medium containing at
least one complex of the anchor DNA, attached to a solid support, and
reporter DNA, where either a part of the anchor DNA or reporter DNA is
designed to form a triple-strand structure with part of the test
sequence. Triplex formation results in displacement of the reporter DNA
which is detected as an indication of the presence of the DNA test
sequence. The method is used to detect DNA sequences, particularly for
identification of bacteria (by detecting genes for ribosomal RNA) in
clinical samples, but also detection of oncogenes and Hepatitis B virus
Sequence 12 BP; 7 A; 0 C; 5 G; 0 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 12;
Best Local Similarity 91.7%; Pred. No. 8.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
934 CTCCTCTTCATT 945
|||||
12 CTCCTCTTCATT 1
390
3H79107
) ABH79107 standard; DNA; 12 BP.
{
{ ABH79107;
{
{ 22-FEB-2002 (first entry)
{
{ Oligonucleotide primer SEQ ID NO 279100 for detecting SNP TSC0006896.
{ SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
{ peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
{ central nervous system; gastrointestinal; respiratory; immune; metabolic.
{ Homo sapiens.
{ WO200177384-A2.
{ 18-OCT-2001.
{ 06-APR-2001; 2001WO-IB000713.
{ 07-APR-2000; 2000DE-01019173.
{ (EPIG-) EPIGENOMICS AG.
{ Olek A, Piepenbrock C, Berlin K;
{ WPI; 2001-657177/75.
391
AB111454
ID AB111454 standard; DNA; 12 BP.
XX
AC AB111454;
XX
AC 22-FEB-2002 (first entry)
XX
DE Oligonucleotide primer SEQ ID NO 311427 for detecting SNP TSC0024493.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 311427; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 12 BP; 2 A; 0 C; 3 G; 7 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 12;
Best Local Similarity 91.7%; Pred. No. 8.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 945 TGGTTTAAATGTA 956
DB 1 TGGTTTAAATGTA 12
|||||
RESULT 391
AB111454
ID AB111454 standard; DNA; 12 BP.
XX
AC AB111454;
XX
AC 22-FEB-2002 (first entry)
XX
DE Oligonucleotide primer SEQ ID NO 311427 for detecting SNP TSC0024493.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 311427; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The

```


CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

SQ Sequence 12 BP; 4 A; 0 C; 2 G; 6 T; 0 U; 0 Other;
 Query Match 14.2%; Score 10.4; DB 1; Length 12;
 Best Local Similarity 91.7%; Pred. No. 8.6e+02;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 945 TGGTTTAATGTA 956
 DB 1 TGATTTAATGTA 12

RESULT 392
 ABH98829/c
 ID ABH98829 standard; DNA; 12 BP.

AC ABH98829;

DT 22-FEB-2002 (first entry)

Oligonucleotide primer SEQ ID NO 298822 for detecting SNP TSC0018300.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is
 designed to detect single-nucleotide polymorphisms and cytosine
 methylation status.

Claim 1; SEQ ID NO 298822; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic
 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 and cytosine methylation status in chemically pretreated genomic DNA. The
 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 range of diseases including immune system, gastrointestinal, respiratory,
 central nervous system, cardiovascular and metabolic disorders. The
 oligomers are also used for detecting cell type differentiation. ABC00010
 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 represent the oligomers described in the invention. NOTE: The sequence
 data for this patent did not form part of the printed specification, but
 was obtained in electronic format from WIPO at
 ftp.wipo.int/pub/published_pct_sequences

SQ Sequence 12 BP; 7 A; 2 C; 0 G; 3 T; 0 U; 0 Other;
 Query Match 14.2%; Score 10.4; DB 1; Length 12;
 Best Local Similarity 91.7%; Pred. No. 8.6e+02;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 945 TGGTTTAATGTA 956
 DB 12 TTGTTTAATGTA 1

RESULT 393

ABI28750/c

ID ABI28750 standard; DNA; 12 BP.

XX AC ABI28750;

XX DT 22-FEB-2002 (first entry)

Oligonucleotide primer SEQ ID NO 328723 for detecting SNP TSC0034506.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is
 designed to detect single-nucleotide polymorphisms and cytosine
 methylation status.

Claim 1; SEQ ID NO 328723; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic
 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 and cytosine methylation status in chemically pretreated genomic DNA. The
 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 range of diseases including immune system, gastrointestinal, respiratory,
 central nervous system, cardiovascular and metabolic disorders. The
 oligomers are also used for detecting cell type differentiation. ABC00010
 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 represent the oligomers described in the invention. NOTE: The sequence
 data for this patent did not form part of the printed specification, but
 was obtained in electronic format from WIPO at
 ftp.wipo.int/pub/published_pct_sequences

SQ Sequence 12 BP; 4 A; 0 C; 6 G; 2 T; 0 U; 0 Other;

Query Match

Best Local Similarity 14.2%; Score 10.4; DB 1; Length 12;

Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 932 CCTCTCTCTTCA 943

DB 12 CCTCTCTCTTCA 1

RESULT 394

ABI13405/c

ID ABI13405 standard; DNA; 12 BP.

XX AC ABI13405;

XX DT 22-FEB-2002 (first entry)

```

1 Oligonucleotide primer SEQ ID NO 313378 for detecting SNP TSC0025707.
2
3 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
4 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
5 central nervous system; gastrointestinal; respiratory; immune; metabolic.
6
7 Homo sapiens.
8
9 WO200177384-A2.
10
11 18-OCT-2001.
12
13 06-APR-2001; 2001WO-IB000713.
14
15 07-APR-2000; 2000DE-01019173.
16
17 (EPIG-) EPIGENOMICS AG.
18
19 Olek A, Piepenbrock C, Berlin K;
20
21 WPI; 2001-657177/75.
22
23 Set of oligonucleotides, useful for diagnosis and cell typing, is
24 designed to detect single-nucleotide polymorphisms and cytosine
25 methylation status.
26
27 Claim 1; SEQ ID NO 313378; 29pp + Sequence Listing; German.
28
29 This invention describes novel oligonucleotide primers or peptide nucleic
30 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
31 and cytosine methylation status in chemically pretreated genomic DNA. The
32 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
33 range of diseases including immune system, gastrointestinal, respiratory,
34 central nervous system, cardiovascular and metabolic disorders. The
35 oligomers are also used for detecting cell type differentiation. ABC00010
36 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
37 represent the oligomers described in the invention. NOTE: The sequence
38 data for this patent did not form part of the printed specification, but
39 was obtained in electronic format from WIPO at
40 ftp.wipo.int/pub/published_pct_sequences
41
42 Sequence 12 BP; 8 A; 2 C; 0 G; 2 T; 0 U; 0 Other;
43
44 Query Match 14.2%; Score 10.4; DB 1; Length 12;
45 Best Local Similarity 91.7%; Pred. No. 8.6e+02;
46 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0
47
48 Y 907 ATTTTCTTTGGT 918
49 C ||||| |||||
50 12 ATTTTATTGGT 1
51
52 RESULT 395
53 BI47521/C
54 D ABI47521 standard; DNA; 12 BP.
55 X
56 X ABI47521;
57 X
58 X 22-FEB-2002 (first entry)
59 X
60 X Oligonucleotide primer SEQ ID NO 347494 for detecting SNP TSC0008573.
61 X
62 X SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
63 X peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
64 X central nervous system; gastrointestinal; respiratory; immune; metabolic.
65 X
66 X Homo sapiens.
67 X
68 X WO200177384-A2.
69 X
70 X 18-OCT-2001.
71 X
72 X 06-APR-2001; 2001WO-IB000713.
73 X

```

PS Claim 1; SEQ ID NO 372877; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 12 BP; 7 A; 2 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 12;
Best Local Similarity 91.7%; Pred. No. 8.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 946 GGTTTAAGTAT 957
DQ 12 GTTTTAAGTAT 1
|||||
|
RESULT 397
ABH95290
TD ABH95290 standard; DNA; 12 BP.
XX
AC ABH95290;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide primer SEQ ID NO 295283 for detecting SNP TSC0016521.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 295283; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at

CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 12 BP; 0 A; 8 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 12;
Best Local Similarity 91.7%; Pred. No. 8.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 931 TCCCTCCTCTTC 942
DB 1 TCCCTCCTCTTC 12
|||||
|
RESULT 398
ABH99684
ID ABH99684 standard; DNA; 12 BP.
XX
AC ABH99684;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide primer SEQ ID NO 299677 for detecting SNP TSC0018678.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 299677; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 12 BP; 4 A; 6 C; 0 G; 2 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 12;
Best Local Similarity 91.7%; Pred. No. 8.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 956 ATCGCTACCAAC 967
DB 1 ATCGCTACCAAC 12
|||||
|

```
SULT 399
I43942/c
  ABI43942 standard; DNA; 12 BP.
  ABI43942;
  22-FEB-2002 (first entry)
  Oligonucleotide primer SEQ ID NO 343915 for detecting SNP TSC0043297.
  SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
  peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
  central nervous system; gastrointestinal; respiratory; immune; metabolic.
  Homo sapiens.
  WO200177384-A2.
  18-OCT-2001.
  06-APR-2001; 2001WO-IB000713.
  07-APR-2000; 2000DE-01019173.
  (EPIG-) EPIGENOMICS AG.
  Olek A, Piepenbrock C, Berlin K;
  WPI; 2001-657177/75.
  Set of oligonucleotides, useful for diagnosis and cell typing, is
  designed to detect single-nucleotide polymorphisms and cytosine
  methylation status.
  Claim 1; SEQ ID NO 343915; 29pp + Sequence Listing; German.
  This invention describes novel oligonucleotide primers or peptide nucleic
  acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
  and cytosine methylation status in chemically pretreated genomic DNA. The
  oligonucleotides are used for diagnosis and/or prognosis of cancer and a
  range of diseases including immune system, gastrointestinal, respiratory,
  central nervous system, cardiovascular and metabolic disorders. The
  oligomers are also used for detecting cell type differentiation. ABC00010
  -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
  represent the oligomers described in the invention. NOTE: The sequence
  data for this patent did not form part of the printed specification, but
  was obtained in electronic format from WIPO at
  ftp.wipo.int/pub/published_pct_sequences
  Sequence 12 BP; 3 A; 0 C; 4 G; 5 T; 0 U; 0 Other;
  This invention describes novel oligonucleotide primers or peptide nucleic
  acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
  and cytosine methylation status in chemically pretreated genomic DNA. The
  oligonucleotides are used for diagnosis and/or prognosis of cancer and a
  range of diseases including immune system, gastrointestinal, respiratory,
  central nervous system, cardiovascular and metabolic disorders. The
  oligomers are also used for detecting cell type differentiation. ABC00010
  -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
  represent the oligomers described in the invention. NOTE: The sequence
  data for this patent did not form part of the printed specification, but
  was obtained in electronic format from WIPO at
  ftp.wipo.int/pub/published_pct_sequences
  Query Match 14.2%; Score 10.4; DB 1; Length 12;
  Best Local Similarity 91.7%; Pred. No. 8.6e+02;
  Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
  955 TATCGCTACCAA 966
  12 TATCACTACCAA 1
  RESULT 400
  3H80382/c
  ABH80382 standard; DNA; 12 BP.
  ABH80382;
  22-FEB-2002 (first entry)
  Oligonucleotide primer SEQ ID NO 280375 for detecting SNP TSC0008537.
  SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
  peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
  central nervous system; gastrointestinal; respiratory; immune; metabolic.
```

```
XX Homo sapiens.
OS WO200177384-A2.
PN 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 280375; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 12 BP; 8 A; 3 C; 0 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 14.2%; Score 10.4; DB 1; Length 12;
XX Best Local Similarity 91.7%; Pred. No. 8.6e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 944 TTGGTTTAAATGT 955
XX |||||
XX Db 12 TTGGTTTAAATGT 1
XX
XX RESULT 401
XX ABI07550
XX ABI07550 standard; DNA; 12 BP.
XX
XX AC ABI07550;
XX
XX XX 22-FEB-2002 (first entry)
XX
XX DE Oligonucleotide primer SEQ ID NO 307523 for detecting SNP TSC0022540.
XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX OS Homo sapiens.
XX
XX PN WO200177384-A2.
XX
XX PD 18-OCT-2001.
XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX
XX PR 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
```

PI Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 307523; 29pp + Sequence Listing; German.
PS
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 12 BP; 1 A; 0 C; 3 G; 8 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 12;
Best Local Similarity 91.7%; Pred. No. 8.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
CY 944 TTGGTTTAATGCT 955
DB 1 TTGGTTTAATGCT 12
|||||
RESULT 402
ABI61878
ID ABI61878 standard; DNA; 12 BP.
XX
AC ABI61878;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide primer SEQ ID NO 361851 for detecting SNP TSC0052889.
DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 361851; 29pp + Sequence Listing; German.
PS
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The

CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 12 BP; 2 A; 6 C; 0 G; 4 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 12;
Best Local Similarity 91.7%; Pred. No. 8.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
CY 929 TATCCCTCCTCT 940
DB 1 TATCCCTCCTCT 12
|||||
RESULT 403
ABH69318
ID ABH69318 standard; DNA; 12 BP.
XX
AC ABH69318;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide primer SEQ ID NO 269295 for detecting SNP TSC0001704.
DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 269295; 29pp + Sequence Listing; German.
PS
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 12 BP; 1 A; 4 C; 0 G; 7 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 12;

```

Best Local Similarity 91.7%; Pred.No.8.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0
, 925 CTTTATCCCTC 936
) ||||| ||||
) 1 CTTTATCCCTC 12

RESULT 404
BI37814/C
) ABI37814 standard; DNA; 12 BP.
)
) ABI37814;
)
) 22-FEB-2002 (first entry)
)
) Oligonucleotide primer SEQ ID NO 337787 for detecting SNP TSC0040076.
)
) SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
) peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
) central nervous system; gastrointestinal; respiratory; immune; metabolic.
)
) Homo sapiens.
)
) WO200177384-A2.
)
) 18-OCT-2001.
)
) 06-APR-2001; 2001WO-IB000713.
)
) 07-APR-2000; 2000DE-01019173.
)
) (EPIG-) EPIGENOMICS AG.
)
) Olek A, Piepenbrock C, Berlin K;
)
) WPI; 2001-657177/75.
)
) Set of oligonucleotides, useful for diagnosis and cell typing, is
) designed to detect single-nucleotide polymorphisms and cytosine
) methylation status.
)
) Claim 1; SEQ ID NO 337787; 29pp + Sequence Listing; German.
)
) This invention describes novel oligonucleotide primers or peptide nucleic
) acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
) and cytosine methylation status in chemically pretreated genomic DNA. The
) oligonucleotides are used for diagnosis and/or prognosis of cancer and a
) range of diseases including immune system, gastrointestinal, respiratory,
) central nervous system, cardiovascular and metabolic disorders. The
) oligomers are also used for detecting cell type differentiation. ABC00010
) -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI92073
) represent the oligomers described in the invention. NOTE: The sequence
) data for this patent did not form part of the printed specification, but
) was obtained in electronic format from WIPO at
) ffp.wipo.int/pub/published_pct_sequences
)
) Sequence 12 BP; 8 A; 0 C; 3 G; 1 T; 0 U; 0 Other;
)
)
) Query Match 14.2%; Score 10.4; DB 1; Length 12;
) Best Local Similarity 91.7%; Pred.No.8.6e+02;
) Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0
)
) Y 919 CTTTGCCCTTTTA 930
) ||||| |||||
) 12 CTTTTCCTTTTA 1

RESULT 405
BH92546/C
D D ABH92546 standard; DNA; 12 BP.
X X ABH92546;

```



```
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 12 BP; 0 A; 5 C; 0 G; 7 T; 0 U; 0 Other;

Query Match      14.2%; Score 10.4; DB 1; Length 12;
Best Local Similarity 91.7%; Pred. No. 8.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

927 TTTATCCCTCT 938
|||||
1 TTTTCCCTCT 12

RESULT 409
ID BH68474/c
AC ABH68474 standard; DNA; 12 BP.
XX ABH68474;
XX
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide primer SEQ ID NO 268451 for detecting SNP TSC0001154.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 268451; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 12 BP; 6 A; 2 C; 0 G; 4 T; 0 U; 0 Other;

Query Match      14.2%; Score 10.4; DB 1; Length 12;
Best Local Similarity 91.7%; Pred. No. 8.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

946 GGTTAATGAT 957
|||||
1 TTTTCCCTCT 12
```

```
Db      12 GGTTAATATAT 1

RESULT 410
ID ABH68840/c
AC ABH68840;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide primer SEQ ID NO 268817 for detecting SNP TSC0001432.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 268817; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 12 BP; 8 A; 2 C; 0 G; 2 T; 0 U; 0 Other;

Query Match      14.2%; Score 10.4; DB 1; Length 12;
Best Local Similarity 91.7%; Pred. No. 8.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

940 TTCAATGGTTTA 951
|||||
12 TTTATGGTTTA 1

Db      12 TTTATGGTTTA 1

RESULT 411
ID ABI30473
AC ABI30473 standard; DNA; 12 BP.
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide primer SEQ ID NO 330446 for detecting SNP TSC0035529.
XX
```


KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 OS Homo sapiens.
 XX WO200177384-A2.
 XX 18-OCT-2001.
 PD 06-APR-2001; 2001WO-IB000713.
 PF 07-APR-2000; 2000DE-01019173.
 XX (EPITG-) EPIGENOMICS AG.
 PA Olek A, Piepenbrock C, Berlin K;
 PI WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 330446; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABF9989, ABF0010-ABF9989, ABH0010-ABH9989 and ABH0010-ABH82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX Sequence 12 BP; 1 A; 0 C; 3 G; 8 T; 0 U; 0 Other;
 SQ Query Match 14.2%; Score 10.4; DB 1; Length 12;
 Best Local Similarity 91.7%; Pred. No. 8.6e+02;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 944 TTGCTTTAATCT 955
 DB 1 TTGCTTTAATCT 12
 RESULT 412
 ABI58887/C
 ID ABI58887 standard; DNA; 12 BP.
 AC ABI58887;
 XX 22-FEB-2002 (first entry)
 DT Oligonucleotide primer SEQ ID NO 358860 for detecting SNP TSC0051348.
 DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 OS WO200177384-A2.
 XX 18-OCT-2001.
 PD 06-APR-2001; 2001WO-IB000713.
 PF 07-APR-2000; 2000DE-01019173.
 XX (EPITG-) EPIGENOMICS AG.
 PA Olek A, Piepenbrock C, Berlin K;
 PI WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 366355; 29pp + Sequence Listing; German.

XX (EPITG-) EPIGENOMICS AG.
 PA Olek A, Piepenbrock C, Berlin K;
 PI WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 358860; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABF9989, ABF0010-ABF9989, ABH0010-ABH9989 and ABH0010-ABH82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX Sequence 12 BP; 4 A; 0 C; 8 G; 0 T; 0 U; 0 Other;
 SQ Query Match 14.2%; Score 10.4; DB 1; Length 12;
 Best Local Similarity 91.7%; Pred. No. 8.6e+02;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 931 TCCTCTCCTCTTC 942
 DB 12 TCCTCTCCTCTTC 1
 RESULT 413
 ABI66382/C
 ID ABI66382 standard; DNA; 12 BP.
 AC ABI66382;
 XX 22-FEB-2002 (first entry)
 DT Oligonucleotide primer SEQ ID NO 366355 for detecting SNP TSC0055697.
 DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 OS WO200177384-A2.
 XX 18-OCT-2001.
 PD 06-APR-2001; 2001WO-IB000713.
 PF 07-APR-2000; 2000DE-01019173.
 XX (EPITG-) EPIGENOMICS AG.
 PA Olek A, Piepenbrock C, Berlin K;
 PI WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 366355; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 12 BP; 8 A; 3 C; 0 G; 1 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 12;
Best Local Similarity 91.7%; Pred. No. 8.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

944 TTGGTTTAATGT 955

12 TTGGTTTAATGT 1

RESULT 414

ABH69400

ABH69400 standard; DNA; 12 BP.

ABH69400;

22-FEB-2002 (first entry)

Oligonucleotide primer SEQ ID NO 269377 for detecting SNP TSC0001727.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 269377; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

SQ Sequence 12 BP; 1 A; 6 C; 0 G; 5 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 12;
Best Local Similarity 91.7%; Pred. No. 8.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 931 TCCCTCCTCTTC 942

1 TCCCTCCTCTTC 12

Db

RESULT 415

ABH74885/c

ID ABH74885 standard; DNA; 12 BP.

XX ABH74885;

XX 22-FEB-2002 (first entry)

XX Oligonucleotide primer SEQ ID NO 274872 for detecting SNP TSC0003709.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 274872; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 12 BP; 6 A; 4 C; 0 G; 2 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 12;
Best Local Similarity 91.7%; Pred. No. 8.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 945 TGGTTTAATGTA 956

12 TGGTTTAATGTA 1

Db

RESULT 416

ABH81639/c

ABH81639 standard; DNA; 12 BP.
ABH81639;
22-FEB-2002 (first entry)
Oligonucleotide primer SEQ ID NO 281632 for detecting SNP TSC0009952.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 281632; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 12 BP; 9 A; 2 C; 0 G; 1 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 12;
Best Local Similarity 91.7%; Pred. No. 8.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 907 ATTTCCTTTGGT 918
|||||
DB 12 ATTTTCTTTGGT 1
RESULT 417
ABI64573/c
ID ABI64573 standard; DNA; 12 BP.
AC ABI64573;
XX
XX
22-FEB-2002 (first entry)
Oligonucleotide primer SEQ ID NO 364546 for detecting SNP TSC0054560.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.

WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 364546; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 12 BP; 6 A; 3 C; 0 G; 3 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 12;
Best Local Similarity 91.7%; Pred. No. 8.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 944 TTGGTTTAAATGT 955
|||||
DB 12 TTGGTTTAAATGT 1
RESULT 418
ABI23775/c
ID ABI23775 standard; DNA; 12 BP.
AC ABI23775;
XX
XX
22-FEB-2002 (first entry)
Oligonucleotide primer SEQ ID NO 323748 for detecting SNP TSC0031585.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;

```
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 323748; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligomers are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 12 BP; 7 A; 0 C; 4 G; 1 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 12;
Best Local Similarity 91.7%; Pred. No. 8.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
922 TGCCTTTATCC 933
12 TGCCTTTATCC 1
RESULT 419
ABH7314/C
ABH77314;
22-FEB-2002 (first entry)
Oligonucleotide primer SEQ ID NO 277307 for detecting SNP TSC0004434.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 277307; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligomers are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 12 BP; 7 A; 3 C; 0 G; 2 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 12;
Best Local Similarity 91.7%; Pred. No. 8.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
922 TGCCTTTATCC 933
12 TGCCTTTATCC 1
RESULT 420
ABH83110/C
ID ABH83110 standard; DNA; 12 BP.
XX
AC ABH83110;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide primer SEQ ID NO 283103 for detecting SNP TSC001145.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 283103; 29pp + Sequence Listing; German.
XX
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligomers are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 12 BP; 5 A; 3 C; 0 G; 4 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 12;
Best Local Similarity 91.7%; Pred. No. 8.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```

QY 946 GGTTTAATGTAT 957
  12 GGTTTAATGAAT 1
RESULT 421
ID ABH84313/c
AC ABH84313;
  22-FEB-2002 (first entry)
XX Oligonucleotide primer SEQ ID NO 284306 for detecting SNP TSC0011770.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 284306; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 12 BP; 7 A; 2 C; 0 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 14.2%; Score 10.4; DB 1; Length 12;
XX Best Local Similarity 91.7%; Pred. No. 8.6e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 945 TGGTTTAATGTA 956
  12 TGGTTTAATTTA 1
RESULT 422
ID ABI41641
AC ABI41641 standard; DNA; 12 BP.
XX
XX ABI41641;
  22-FEB-2002 (first entry)
XX

```

```

XX Oligonucleotide primer SEQ ID NO 341614 for detecting SNP TSC0042137.
DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 341614; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 12 BP; 1 A; 0 C; 2 G; 9 T; 0 U; 0 Other;
XX
XX Query Match 14.2%; Score 10.4; DB 1; Length 12;
XX Best Local Similarity 91.7%; Pred. No. 8.6e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY 907 ATTTTCTTTTGGT 918
  1 ATTTTCTTTTGGT 12
Db
RESULT 423
ID ABI51169
AC ABI51169 standard; DNA; 12 BP.
XX
XX ABI51169;
  22-FEB-2002 (first entry)
XX
XX Oligonucleotide primer SEQ ID NO 351142 for detecting SNP TSC0047118.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX

```

06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIC-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
Claim 1; SEQ ID NO 351142; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
Sequence 12 BP; 4 A; 0 C; 3 G; 5 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 12;
Best Local Similarity 91.7%; Pred. No. 8.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
945 TGGTTTAATGTA 956
|||||
1 TGGTATAATGTA 12
RESULT 424
3170333/c
ABI70333 standard; DNA; 12 BP.
ABI70333;
22-FEB-2002 (first entry)
Oligonucleotide primer SEQ ID NO 370306 for detecting SNP TSC0058109.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIC-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

XX Claim 1; SEQ ID NO 370306; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX Sequence 12 BP; 7 A; 2 C; 0 G; 3 T; 0 U; 0 Other;
SQ Query Match 14.2%; Score 10.4; DB 1; Length 12;
Best Local Similarity 91.7%; Pred. No. 8.6e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 946 GGTTTAATGTA 957
|||||
12 GGTTTAATGTA 1
DB 12 GGTTTAATGTA 1
RESULT 425
ABI60448
ID ABI60448 standard; DNA; 12 BP.
XX AC ABI60448;
XX 22-FEB-2002 (first entry)
XX Oligonucleotide primer SEQ ID NO 360421 for detecting SNP TSC0010752.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIC-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
XX Claim 1; SEQ ID NO 360421; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but

```
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 12 BP; 2 A; 0 C; 2 G; 8 T; 0 U; 0 Other;
  Query Match      14.2%; Score 10.4; DB 1; Length 12;
  Best Local Similarity 91.7%; Pred. No. 8.6e+02;
  Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 940 TTCATTGGTTTA 951
Db 1 TTTATTGGTTTA 12
  ||| ||| ||| ||| |||
  ||| ||| ||| ||| |||

RESULT 426
ABI75562
ID ABI75562 standard; DNA; 12 BP.
XX
AC ABI75562;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide primer SEQ ID NO 375535 for detecting SNP TSC0061311.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
FN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
PT WPI; 2001-657177/75.
XX
DR Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 375535; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 12 BP; 3 A; 0 C; 2 G; 7 T; 0 U; 0 Other;
  Query Match      14.2%; Score 10.4; DB 1; Length 12;
  Best Local Similarity 91.7%; Pred. No. 8.6e+02;
  Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 945 TGGTTTAATGTA 956
Db 1 TGGTTTAATTTA 12
  ||| ||| ||| ||| |||
  ||| ||| ||| ||| |||

RESULT 427
ABH67612/C
ID ABH67612 standard; DNA; 12 BP.
XX
AC ABH67612;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide primer SEQ ID NO 267589 for detecting SNP TSC0000361.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
FN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
PT WPI; 2001-657177/75.
XX
DR Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 267589; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 12 BP; 2 A; 2 C; 6 G; 2 T; 0 U; 0 Other;
  Query Match      14.2%; Score 10.4; DB 1; Length 12;
  Best Local Similarity 91.7%; Pred. No. 8.6e+02;
  Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 957 TCGCTACCAACG 968
Db 12 TCGCTACCAACG 1
  ||| ||| ||| ||| |||
  ||| ||| ||| ||| |||

RESULT 428
ABX03851
ID ABX03851 standard; cDNA; 12 BP.
XX
AC ABX03851;
XX
DT 09-JAN-2003 (first entry)
XX
DE DNA encoding secreted protein signal peptide sequence #60.
XX
KW Differential display method; leucine-rich motif; transmembrane protein;
KW secreted protein; secreted protein signal peptide; ss.
```

Unidentified.

WO200259259-A2.

01-AUG-2002.

23-JAN-2002; 2002WO-IL000071.

23-JAN-2001; 2001US-0263158P.

(UYRA-) UNIV RAMOT APPLIED RES & IND DEV LTD.

Wreschner DH;

WPI; 2002-599769/64.

P-PSDB; ABG98380.

Differential display method for identifying secreted or transmembrane protein, comprises contacting a DNA with a first primer that hybridizes to a sequence coding for a leucine-rich motif and with a second oligonucleotide primer.

Disclosure; Fig 2; 37pp; English.

The invention relates to a differential display comprising contacting cDNA with a first primer that hybridizes to an oligonucleotide sequence coding for a leucine-rich motif, and with a second oligonucleotide primer to form a cDNA-hybrid molecule. The method comprises obtaining mRNA from at least 2 samples, synthesizing cDNA from the RNA of each sample, contacting the cDNA with a first primer that hybridizes to an oligonucleotide sequence coding for a leucine-rich motif, and with a second oligonucleotide primer to form cDNA-hybrid molecules, amplifying the -hybrid molecules, detecting amplified products and comparing the amplified products from each sample to identify distinctive amplified products coding for at least one secreted or transmembrane protein. The method is useful for discovering novel secreted and/or transmembrane proteins which are important for cell processes and play an important role in determining its phenotype, and which act as mediators for the transfer of signals from external environment into the cell itself, thus modulating gene expression. Sequences ABX03792-ABX03869 represent DNA encoding secreted protein signal peptide sequences

Sequence 12 BP; 0 A; 6 C; 1 G; 5 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 12;

Best Local Similarity 91.7%; Pred. No. 8.6e+02;

Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

931 TCCTCTCCTCTTC 942

1 TCCTCTCCTCTTC 12

RESULT 429

ABX79961/c

ABX79961 standard; cDNA; 12 BP.

ABX79961;

17-APR-2003 (first entry)

EST polymorphic DNA repeat polynucleotide #286.

EST; expressed sequence tag; ss; polymorphic repeat; tandem repeat; polymorphic marker prediction of ubiquitous simple sequences; POMPOUS; Rep-X; human; genetic disease; drug-treatment; Machado-Joseph; Haw River syndrome; Huntington's disease; fragile-X syndrome; Friedreich's ataxia; myotonic dystrophy; hyperandrogenaemia; spinal atrophy; bulbar atrophy; spinocerebellar ataxia.

Homo sapiens.

PN US6472154-B1.

XX 29-OCT-2002.

XX 31-DEC-1999; 99US-00475947.

XX 31-DEC-1999; 99US-00475947.

XX (TEXA) UNIV TEXAS SYSTEM.

XX Garner HR, Wren JD, Minna JD, Fondon JW;

XX WPI; 2003-208818/20.

XX Identifying a candidate polymorphic repeat within a coding sequence, for understanding or treating genetic disease, comprises detecting tandem repeats in a target coding sequence and scoring the repeats for polymorphic probability.

XX Example; Col 1137; 588pp; English.

XX The invention discloses a method for identifying a candidate polymorphic repeat within a coding sequence (expressed sequence tag, EST), which comprises detecting tandem repeats in a target coding sequence, scoring the repeats for polymorphic probability and generating a dataset correlating the repeats with polymorphic probability to identify a candidate polymorphic repeat. The computational methods (polymorphic marker prediction of ubiquitous simple sequences, POMPOUS, and Rep-X) are useful for identifying and detecting candidate polymorphic repeats in human genes, which can be used to understand, treat or eliminate genetic diseases, predispositions or adverse drug-treatment reactions. Examples of diseases linked to nucleotide repeats are Machado-Joseph, Haw River syndrome, Huntington's disease, fragile-X syndrome, Friedreich's ataxia, myotonic dystrophy, hyperandrogenaemia, spinal and bulbar atrophy and spinocerebellar ataxia. The sequences presented in ABX79676-ABX80022 are the polymorphic repeats identified for a search of human ESTs

Sequence 12 BP; 6 A; 0 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 12;

Best Local Similarity 91.7%; Pred. No. 8.6e+02;

Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 931 TCCTCTCCTCTTC 942

12 TCCTCTCCTCTTC 1

RESULT 430

AAQ25461/c

ID AAQ25461 standard; DNA; 13 BP.

XX AAQ25461;

XX 25-MAR-2003 (revised)

DT 07-DEC-1992 (first entry)

DE Purine rich HPV-11 target duplex sequence.

XX Target; Human Papilloma Virus; AIDS; triplex; HIV; herpes; hepatitis; malignancy; ds.

XX Synthetic.

XX WO9209705-A1.

XX 11-JUN-1992.

XX 25-NOV-1991; 91WO-US008811.

XX 23-NOV-1990; 90US-00617907.

XX 18-JAN-1991; 91US-00643382.

XX 08-APR-1991; 91US-00683420.

FR 17-APR-1991; 91US-00686544.
FR 17-APR-1991; 91US-00686546.
FR 17-APR-1991; 91US-00686547.
FR 27-SEP-1991; 91US-00766733.
XX (GILE-) GILEAD SCI INC.
XX
XX Froehler B, Krawczyk S, Matteucci MD, Milligan J;
XX WPI; 1992-217083/26.
XX
XX New oligomers contg. modified bases - which form a triplex with G-C
XX doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,
XX herpes malignancy and inflammation.
XX
XX Claim 11; Page 63; 77pp; English.
XX
XX The sequence depicts human Papilloma Virus type-11 beginning at
XX nucleotide 927. The sequence is a viral duplex sequence which contains a
XX purine-rich region concentrated on one chain of the duplex. The sequence
XX may be prep'd. by standard DNA synthesis. The HPV duplex sequence is used
XX as a target for novel oligomers which are capable of forming a triplex at
XX physiological pH by coupling into the major groove of the DNA duplex. Two
XX such oligomers HPV201-HPV202 are capable of forming a triplex with this
XX sequence. The oligomers are used in the diagnosis and therapy of HPV
XX infection. Similar oligomers may be used to target viral DNA duplexes
XX specific for HIV, herpes and malignancy. The triple helices form under
XX mild conditions thus assays may be carried out without subjecting the
XX test specimen to harsh conditions. The oligomer is able to inhibit gene
XX expression, as verified by in vitro systems See also AAQ25452-25501 and
XX AAQ30226-448. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 13 BP; 5 A; 0 C; 8 G; 0 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 933 CCTCCTCTTCAT 944
Db |||||
13 CCTCCTCTTCCT 2

RESULT 431
AAT90162/C
ID AAT90162 standard; DNA; 13 BP.
XX AAT90162;
XX
XX 03-DEC-1997 (first entry)
XX
XX Fluorodated peptide nucleic acid probe for wild type cystic fibrosis.
XX Peptide nucleic acid; PNA; probe; cystic fibrosis; separation; detection;
XX wild type; F508; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1 /*tag= a
XX FT /note= "fluorodated"
XX modified_base 13 /*tag= b
XX FT /note= "amidated"
XX
XX WO9712995-A1.
XX
XX 10-APR-1997.
XX
XX 04-OCT-1996; 96WO-US015918.
XX
XX 06-OCT-1995; 95US-0004953P.
XX

XX (PERS-) PERSEPTIVE BIOSYSTEMS INC.
XX Fuchs M, Egholm M, Okeefe H, Yao XW;
XX WPI; 1997-226238/20.
XX
XX Separation and detection of target sequences in mixed nucleic acid sample
XX solutions - by mixing the sample with a labelled PNA probe which has a
XX sequence complementary to at least a portion of the target sequence.
XX
XX Example 7; Page 31; 66pp; English.
XX
XX The present sequence is a fluorodated peptide nucleic acid (PNA) probe
XX for the wild type cystic fibrosis allele F508, which was used in an
XX example of a novel method for separating single stranded nucleic acids
XX from their complementary strands, and detecting a selected target
XX sequence (STG) in a sample. The method comprises mixing the sample with a
XX PNA probe for the STG, to form a detectable duplex, separating the
XX species in the sample and detecting the duplex
XX
SQ Sequence 13 BP; 8 A; 3 C; 1 G; 1 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 911 TCTTTGTCCTTT 922
Db |||||
12 TCTTTGTCGTTT 1

RESULT 432
ABC19743/C
ID ABC19743 standard; DNA; 13 BP.
XX ABC19743;
XX
XX 20-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 19760 for detecting SNP TSC0004086.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 19760; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,

central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 8 A; 2 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

940 TTCAATGGTTTA 951

|||||
13 TTAATGGTTTA 2

RESULT 433

IC00010

ABC00010 standard; DNA; 13 BP.

ABC00010;

20-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 1 for detecting SNP TSC00000002.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB0000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 1; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 2 A; 0 C; 2 G; 9 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;

Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 940 TTCAATGGTTTA 951

|||||
Db 1 TTAATGGTTTA 12

RESULT 434

ABF50860/c

ID ABF50860 standard; DNA; 13 BP.

XX

AC ABF50860;

XX 21-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 150857 for detecting SNP TSC0038073.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB0000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

XX Claim 1; SEQ ID NO 150857; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 6 A; 0 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;

Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 928 TTATCCTTCCTC 939

|||||
Db 13 TTATCCTTCCTC 2

RESULT 435

ABH04825/c

ID ABH04825 standard; DNA; 13 BP.

XX

AC ABH04825;

XX 22-FEB-2002 (first entry)

```

XX DE Oligonucleotide SEQ ID NO 204802 for detecting SNP TSC0050236.
XX XX
XX SN: single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX XX
XX WO200177384-A2.
XX XX
XX PD 18-OCT-2001.
XX XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX XX
XX PR 07-APR-2000; 2000DE-01019173.
XX XX
XX PA (EPIG-) EPIGENOMICS AG.
XX XX
XX PI Olek A, Piepenbrock C, Berlin K;
XX XX
XX WPI; 2001-657177/75.
XX XX
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX XX
XX PS Claim 1; SEQ ID NO 204802; 29pp + Sequence Listing; German.
XX CC
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX XX
XX SQ Sequence 13 BP; 5 A; 3 C; 1 G; 4 T; 0 U; 0 Other;
XX
Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Cy 948 TTTAATGATCG 959
Db 12 TGTAATGATCG 1

RESULT 436
ABC68408
ID ABC68408 standard; DNA; 13 BP.
XX AC
XX ABC68408;
XX XX
XX DT 21-FEB-2002 (first entry)
XX XX
XX DE Oligonucleotide SEQ ID NO 68425 for detecting SNP TSC0017839.
XX XX
XX SN: single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX XX
XX OS Homo sapiens.
XX XX
XX WO200177384-A2.
XX XX
XX PD 18-OCT-2001.
XX XX
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.

```

```

PF 06-APR-2001; 2001WO-IB000713.
XX XX
XX 07-APR-2000; 2000DE-01019173.
XX XX
XX (EPIG-) EPIGENOMICS AG.
XX XX
XX PI Olek A, Piepenbrock C, Berlin K;
XX XX
XX WPI; 2001-657177/75.
XX XX
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX XX
XX PS Claim 1; SEQ ID NO 68425; 29pp + Sequence Listing; German.
XX CC
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX XX
XX SQ Sequence 13 BP; 2 A; 0 C; 2 G; 9 T; 0 U; 0 Other;
XX
Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Cy 940 TTCATTGCTTTA 951
Db 2 TTTATTGCTTTA 13

RESULT 437
ABF07410/c
ID ABF07410 standard; DNA; 13 BP.
XX AC
XX ABF07410;
XX XX
XX DT 21-FEB-2002 (first entry)
XX XX
XX DE Oligonucleotide SEQ ID NO 107407 for detecting SNP TSC0026900.
XX XX
XX SN: single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX XX
XX OS Homo sapiens.
XX XX
XX WO200177384-A2.
XX XX
XX PD 18-OCT-2001.
XX XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX XX
XX PR 07-APR-2000; 2000DE-01019173.
XX XX
XX PA (EPIG-) EPIGENOMICS AG.
XX XX
XX PI Olek A, Piepenbrock C, Berlin K;
XX XX
XX WPI; 2001-657177/75.
XX XX
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.

```

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC000010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but

```
RESULT 440
ABF68455/c
ID ABF68455 standard; DNA; 13 BP.
XX AC
XX ABF68455;
XX 22-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 168452 for detecting SNP TSC0042131.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX CS Homo sapiens.
XX FN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX FR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX FS Claim 1; SEQ ID NO 168452; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 6 A; 3 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 941 TCATTGGTTTAA 952
Db 13 TAAATGGTTTAA 2

RESULT 441
ABH19299/c
ID ABH19299 standard; DNA; 13 BP.
XX AC
XX ABH19299;
XX 22-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 219276 for detecting SNP TSC0053323.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX CS Homo sapiens.
XX FN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX FR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
```

```
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX FR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX FS Claim 1; SEQ ID NO 219276; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 8 A; 2 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 948 TTTAATGTAATCG 959
Db 13 TTTAATGTAATG 2

RESULT 442
ABH35545/c
ID ABH35545 standard; DNA; 13 BP.
XX AC
XX ABH35545;
XX 22-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 235522 for detecting SNP TSC0057502.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX CS Homo sapiens.
XX FN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX FR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
```

Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
Claim 1; SEQ ID NO 235522; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 7 A; 4 C; 0 G; 2 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02; Mismatches 0; Indels 0; Gaps 0;
Matches 11; Conservative 0;
/ 944 TTGGTTTAATGT 955
12 TTGGTTTAATGT 1
35ULT 443
3C41102
ABC44102 standard; DNA; 13 BP.
ABC44102;
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 44119 for detecting SNP TSC0012979.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
Claim 1; SEQ ID NO 44119; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02; Mismatches 0; Indels 0; Gaps 0;
Matches 11; Conservative 0;
QY 945 TCGTTTAATGTA 956
2 TCGTTTAATGTA 13
Db
RESULT 444
ABC44654
ID ABC44654 standard; DNA; 13 BP.
XX
AC ABC44654;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 44671 for detecting SNP TSC0013085.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
XX
PS Claim 1; SEQ ID NO 44671; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 4 A; 0 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02; 1; Indels 0; Gaps 0;
Matches 11; Conservative 0; Mismatches 0; Mismatches 1; Indels 0; Gaps 0;

Qy 941 TCATTGGTTTAA 952
| | | | | | | | | |
Db 2 TTATTGGTTTAA 13

RESULT 445

ABF36890
ID ABF36890 standard; DNA; 13 BP.

AC ABF36890;

DT 21-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 136887 for detecting SNP TSC0034209.

SNP: single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

OS Homo sapiens.

PN WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

PT Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.

PS Claim 1; SEQ ID NO 136887; 29pp + Sequence Listing; German.

CC This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 4 A; 0 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02; 1; Indels 0; Gaps 0;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 941 TCATTGGTTTAA 952
| | | | | | | | | |
Db 2 TAATTGGTTTAA 13

RESULT 446

ABF58614/c
ID ABF58614 standard; DNA; 13 BP.

XX

AC ABF58614;
XX 21-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 158611 for detecting SNP TSC0039924.

SNP: single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

OS Homo sapiens.

PN WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

PT Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.

PS Claim 1; SEQ ID NO 158611; 29pp + Sequence Listing; German.

CC This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 3 A; 0 C; 8 G; 2 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02; 1; Indels 0; Gaps 0;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 932 CCTCTCTCTTCA 943
| | | | | | | | | |
Db 13 CCTCTCTCTTCA 2

RESULT 447

ABC68409/c
ID ABC68409 standard; DNA; 13 BP.

XX ABC68409;

XX 21-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 68426 for detecting SNP TSC0017839.

SNP: single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

OS Homo sapiens.

XX WO200177384-A2.

CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

XX
 SQ Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;
 Query Match 14.2%; Score 10.4; DB 1; Length 13;
 Best Local Similarity 91.7%; Pred. No. 9e+02;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 945 TGGTTTAATGTA 956
 ||||| |||||
 Db 13 TGGTTTATTGTA 2

RESULT 450
 ABF23707/c
 ID ABF23707 standard; DNA; 13 BP.

AC ABF23707;

DT 21-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 123704 for detecting SNP TSC0030930.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.

PS Claim 1; SEQ ID NO 123704; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 9 A; 2 C; 0 G; 2 T; 0 U; 0 Other;

XX Query Match 14.2%; Score 10.4; DB 1; Length 13;

XX Best Local Similarity 91.7%; Pred. No. 9e+02;
 XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 907 ATTTTCTTTGGT 918

Db 13 ATTTTCTTTGGT 2

RESULT 451
 ABH19336

ID ABH19336 standard; DNA; 13 BP.

XX ABH19336;

DT 22-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 219313 for detecting SNP TSC0053330.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.

PS Claim 1; SEQ ID NO 219313; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 5 A; 0 C; 3 G; 5 T; 0 U; 0 Other;

XX Query Match 14.2%; Score 10.4; DB 1; Length 13;

XX Best Local Similarity 91.7%; Pred. No. 9e+02;
 XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 946 GGTTTTAATGTA 957

Db 2 GGTTTAAGTAT 13

RESULT 452
 ABF73676/c

ID ABF73676 standard; DNA; 13 BP.

XX ABF73676;

DT 22-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 173673 for detecting SNP TSC0043251.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 173673; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 6 A; 0 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;

Best Local Similarity 91.7%; Pred. No. 9e+02;

Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

924 CCTTTTATCCCT 935

||| |||||

12 CCTCTTATCCCT 1

35815

ABF58615 standard; DNA; 13 BP.

ABF58615;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 158612 for detecting SNP TSC0039924.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 158612; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 2 A; 8 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;

Best Local Similarity 91.7%; Pred. No. 9e+02;

Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

932 CCTCTCTCTTCA 943

||| |||||

1 CCTCTCTTACA 12

RESULT 454

ABH35606/C

ID ABH35606 standard; DNA; 13 BP.

AC ABH35606;

XX

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 235583 for detecting SNP TSC0057515.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 235583; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

SQ Sequence 13 BP; 6 A; 0 C; 7 G; 0 T; 0 U; 0 Other;

XX Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 931 TCCCTCCTCTTC 942
Db 13 TCCCTCCTCTTC 2

RESULT 455
ABC43328/c
ID ABC43328 standard; DNA; 13 BP.
XX AC ABC43328;
XX AC ABC43328;
XX DT 21-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 43345 for detecting SNP TSC0012831.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
XX Claim 1; SEQ ID NO 43345; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 13 BP; 7 A; 1 C; 3 G; 2 T; 0 U; 0 Other;

XX Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 939 CTTTCATTCGTTT 950
Db 12 CTTTCATTCGTTT 1

RESULT 456
ABC50231/c
ID ABC50231 standard; DNA; 13 BP.
XX AC ABC50231;
XX AC ABC50231;
XX DT 21-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 50248 for detecting SNP TSC0014136.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
XX Claim 1; SEQ ID NO 50248; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

SQ Sequence 13 BP; 7 A; 2 C; 0 G; 4 T; 0 U; 0 Other;

XX Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 946 GGTTAATGTTAT 957
Db 12 GGTTAATGTTAT 1

RESULT 457

F26824
ABF26824 standard; DNA; 13 BP.
ABF26824;
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 126821 for detecting SNP TSC0031730.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB0000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 126821; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABF00010-ABF99989, ABH00010-ABH99989 and ABT00010-ABT99989
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 2 A; 0 C; 2 G; 9 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02; 0; Mismatches 0; Gaps 0;
Matches 11; Conservative 0; Indels 1;
Y 944 TTGGTTTAATGT 955
b 2 TTGGTTTAATTT 13
RESULT 458
BF26825/c
D ABF26825 standard; DNA; 13 BP.
X ABF26825;
X
X 21-FEB-2002 (first entry)
X
X Oligonucleotide SEQ ID NO 126822 for detecting SNP TSC0031730.
X
X SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
X peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
X central nervous system; gastrointestinal; respiratory; immune; metabolic.
X

OS Homo sapiens.
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB0000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 126822; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABF00010-ABF99989, ABH00010-ABH99989 and ABT00010-ABT99989
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 9 A; 2 C; 0 G; 2 T; 0 U; 0 Other;
SQ
Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02; 0; Mismatches 0; Gaps 0;
Matches 11; Conservative 0; Indels 1;
QY 944 TTGGTTTAATGT 955
Db 12 TTGGTTTAATTT 1
RESULT 459
ABH19298
ID ABH19298 standard; DNA; 13 BP.
XX
XX ABH19298;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 219275 for detecting SNP TSC0053323.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB0000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
PI

```

XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 219275; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 U; 0 Other;
SQ
XX
XX Query Match 14.2%; Score 10.4; DB 1; Length 13;
XX Best Local Similarity 91.7%; Pred. No. 9e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 948 TTTATGTCG 959
XX |||||
XX 1 TTTATGTCG 12
XX
XX RESULT 460
XX ABF99636
XX ID ABF99636 standard; DNA; 13 BP.
XX AC ABF99636;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 199633 for detecting SNP TSC0049113.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 199633; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a

```

```

XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;
SQ
XX
XX Query Match 14.2%; Score 10.4; DB 1; Length 13;
XX Best Local Similarity 91.7%; Pred. No. 9e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 943 ATTGTTTAATG 954
XX |||||
XX 2 ATTGTTTAATG 13
XX
XX RESULT 461
XX ABF50859
XX ID ABF50859 standard; DNA; 13 BP.
XX AC ABF50859;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 150856 for detecting SNP TSC0038073.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 150856; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 2 A; 6 C; 0 G; 5 T; 0 U; 0 Other;
SQ
XX
XX Query Match 14.2%; Score 10.4; DB 1; Length 13;
XX Best Local Similarity 91.7%; Pred. No. 9e+02;

```

```
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
      928 TTATCCCTCCTC 939
      |||||
      1 TTATCCATCCTC 12

RESULT 462
BF50863
) ABF50863 standard; DNA; 13 BP.
(
(
( ABF50863;
(
( 21-FEB-2002 (first entry)
(
( Oligonucleotide SEQ ID NO 150860 for detecting SNP TSC0038073.
(
( SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
( peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
( central nervous system; gastrointestinal; respiratory; immune; metabolic.
(
( Homo sapiens.
(
( WO200177384-A2.
(
( 18-OCT-2001.
(
( 06-APR-2001; 2001WO-IB000713.
(
( 07-APR-2000; 2000DE-01019173.
(
( (EPIG-) EPIGENOMICS AG.
(
( Olek A, Piepenbrock C, Berlin K;
(
( WPI; 2001-657177/75.
(
( Set of oligonucleotides, useful for diagnosis and cell typing, is
( designed to detect single-nucleotide polymorphisms and cytosine
( methylation status.
(
( Claim 1; SEQ ID NO 150860; 29pp + Sequence Listing; German.
(
( This invention describes novel oligonucleotide primers or peptide nucleic
( acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
( and cytosine methylation status in chemically pretreated genomic DNA. The
( oligonucleotides are used for diagnosis and/or prognosis of cancer and a
( range of diseases including immune system, gastrointestinal, respiratory,
( central nervous system, cardiovascular and metabolic disorders. The
( oligomers are also used for detecting cell type differentiation. ABC00010
( -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
( data for this patent did not form part of the invention. NOTE: The sequence
( was obtained in electronic format from WIPO at
( ftp.wipo.int/pub/published_pct_sequences
(
( Sequence 13 BP; 1 A; 6 C; 1 G; 5 T; 0 U; 0 Other;
(
( This invention describes novel oligonucleotide primers or peptide nucleic
( acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
( and cytosine methylation status in chemically pretreated genomic DNA. The
( oligonucleotides are used for diagnosis and/or prognosis of cancer and a
( range of diseases including immune system, gastrointestinal, respiratory,
( central nervous system, cardiovascular and metabolic disorders. The
( oligomers are also used for detecting cell type differentiation. ABC00010
( -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
( data for this patent did not form part of the invention. NOTE: The sequence
( was obtained in electronic format from WIPO at
( ftp.wipo.int/pub/published_pct_sequences
(
( Sequence 13 BP; 1 A; 6 C; 1 G; 5 T; 0 U; 0 Other;
(
( Query Match 14.2%; Score 10.4; DB 1; Length 13;
( Best Local Similarity 91.7%; Pred. No. 9e+02;
( Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
(
( Y 928 TTATCCCTCCTC 939
( |||||
( 1 TTATCCCTCCTC 12
(
( RESULT 463
( BH61174
( D ABE61174 standard; DNA; 13 BP.
( X
( C ABE61174;
( X
```

```
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 261151 for detecting SNP TSC0063421.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
PI WPI; 2001-657177/75.
DR
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 261151; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX data for this patent did not form part of the invention. NOTE: The sequence
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 3 A; 1 C; 3 G; 6 T; 0 U; 0 Other;
SQ
Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
(
QY 948 TTTAATGTATCG 959
|||
2 TTTAATGTATCG 13
Db
(
RESULT 464
ABC44655/c
ID ABC44655 standard; DNA; 13 BP.
XX
XX AC ABC44655;
XX
XX 21-FEB-2002 (first entry)
DT
XX
XX Oligonucleotide SEQ ID NO 44672 for detecting SNP TSC0013085.
DE
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
PN
XX
XX 18-OCT-2001.
PD
```

```

XX PF 06-APR-2001; 2001WO-IB000713.
XX DR 07-APR-2000; 2000DE-01019173.
XX FA (EPIG-) EPIGENOMICS AG.
XX FI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX PS Claim 1; SEQ ID NO 44672; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 7 A; 2 C; 0 G; 4 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 941 TCATTGGTTTAA 952
DQ 12 TTATTGGTTTAA 1
RESULT 465
ABC99595/c
ID ABC99595 standard; DNA; 13 BP.
AC ABC99595;
XX 21-FEB-2002 (first entry)
XX Oligonucleotide SEQ ID NO 99612 for detecting SNP TSC0024745.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX PS Claim 1; SEQ ID NO 2; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 7 A; 2 C; 0 G; 4 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 941 TCATTGGTTTAA 952
DQ 12 TTATTGGTTTAA 1

```

```

PT methylation status.
XX Claim 1; SEQ ID NO 99612; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 6 A; 4 C; 0 G; 3 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 945 TGGTTTAAATGTA 956
DQ 13 TGGTTTAAATGTA 2
RESULT 466
ABC00011/c
ID ABC00011 standard; DNA; 13 BP.
XX ABC00011;
AC ABC00011;
XX 20-FEB-2002 (first entry)
XX Oligonucleotide SEQ ID NO 2 for detecting SNP TSC00000002.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX PS Claim 1; SEQ ID NO 2; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 6 A; 4 C; 0 G; 3 T; 0 U; 0 Other;

```

data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 9 A; 2 C; 0 G; 2 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02; 1; Indels 0; Gaps 0;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

940 TTCAATGGTTTA 951

|||||
13 TTATTTGGTTTA 2

RESULT 467

ABC36750/C

ABC36750 standard; DNA; 13 BP.

ABC36750;

20-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 36767 for detecting SNP TSC0011511.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 36767; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 8 A; 0 C; 5 G; 0 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02; 1; Indels 0; Gaps 0;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

918 TCCTTGCCTTT 929

|||||
12 TCCTTGCCTTT 1

RESULT 468

ABF41201/C

ABF41201 standard; DNA; 13 BP.

ABF41201;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 141198 for detecting SNP TSC0035389.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 141198; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 8 A; 2 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02; 1; Indels 0; Gaps 0;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 943 ATTCGTTTAATG 954

|||||
12 ATTCGTTTAATG 1

RESULT 469

ABH27936/C

ABH27936 standard; DNA; 13 BP.

ABH27936;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 227913 for detecting SNP TSC0055573.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 227913; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 5 A; 0 C; 6 G; 2 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Q/ 929 TATCCCTCCTCT 940
Db 12 TATCACCCTCTCT 1
RESULT 470
ABH35607
ID ABH35607 standard; DNA; 13 BP.
AC ABH35607;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 235584 for detecting SNP TSC0057515.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 235584; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligonucleotides are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX Sequence 13 BP; 5 A; 0 C; 6 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 14.2%; Score 10.4; DB 1; Length 13;
XX Best Local Similarity 91.7%; Pred. No. 9e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX Q/ 929 TATCCCTCCTCT 940
XX Db 12 TATCACCCTCTCT 1
XX
XX RESULT 470
XX ABH35607
XX ID ABH35607 standard; DNA; 13 BP.
XX AC ABH35607;
XX XX
XX XX 22-FEB-2002 (first entry)
XX XX
XX XX Oligonucleotide SEQ ID NO 235584 for detecting SNP TSC0057515.
XX XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX KW Homo sapiens.
XX OS
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX

(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 235584; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 0 A; 7 C; 0 G; 6 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Q/ 931 TCCCTCCTCTCT 942
Db 1 TCCCTCCTCTCT 12
RESULT 471
ABH38189
ID ABH38189 standard; DNA; 13 BP.
XX
XX AC ABH38189;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 238166 for detecting SNP TSC0058074.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX XX WO200177384-A2.
XX XX
XX XX 18-OCT-2001.
XX XX
XX XX 06-APR-2001; 2001WO-IB000713.
XX XX
XX XX 07-APR-2000; 2000DE-01019173.
XX XX
XX XX (EPIG-) EPIGENOMICS AG.
XX XX Olek A, Piepenbrock C, Berlin K;
XX XX WPI; 2001-657177/75.
XX XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 238166; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic

acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 1 A; 5 C; 0 G; 7 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02; 1; Indels 0; Gaps 0;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

934 CTCCTCTTCATT 945

1 CTCCTCTTCATT 12

RESULT 472

ABH47937

ABH47937 standard; DNA; 13 BP.

ABH47937;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 247914 for detecting SNP TSC0060587.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 247914; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 3 A; 7 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02; 1; Indels 0; Gaps 0;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 932 CCTCTCTTCTCA 943

Db 2 CCTCTCTTCTCA 13

RESULT 473

ABH61175/c

ID ABH61175 standard; DNA; 13 BP.

XX ABH61175;

XX 22-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 261152 for detecting SNP TSC0063421.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

OS Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

XX Claim 1; SEQ ID NO 261152; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 6 A; 3 C; 1 G; 3 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02; 1; Indels 0; Gaps 0;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 948 TTTAATGTATCG 959

Db 12 TTTAATGTATCG 1

RESULT 474

ABC34963

ID ABC34963 standard; DNA; 13 BP.

```
XX AC ABC34963;
XX DT 20-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 34980 for detecting SNP TSC0011109.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX FN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX FS Claim 1; SEQ ID NO 34980; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 2 A; 4 C; 0 G; 6 T; 0 U; 1 Other;
XX CC Query Match 14.2%; Score 10.4; DB 1; Length 13;
XX CC Best Local Similarity 91.7%; Pred. No. 9e+02;
XX CC Mismatches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX QY 927 TTTATCCCTCCT 938
XX DB ||||| |||||
XX 2 TTTATCCCTCAT 13
XX RESULT 475
XX ABC36751
XX ID ABC36751 standard; DNA; 13 BP.
XX AC ABC36751;
XX DT 20-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 36768 for detecting SNP TSC0011511.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX FN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 2 A; 4 C; 0 G; 6 T; 0 U; 1 Other;
XX CC Query Match 14.2%; Score 10.4; DB 1; Length 13;
XX CC Best Local Similarity 91.7%; Pred. No. 9e+02;
XX CC Mismatches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX QY 927 TTTATCCCTCCT 938
XX DB ||||| |||||
XX 2 TTTATCCCTCAT 13
XX RESULT 475
XX ABC36751
XX ID ABC36751 standard; DNA; 13 BP.
XX AC ABC36751;
XX DT 20-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 36768 for detecting SNP TSC0011511.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX FN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 0 A; 5 C; 0 G; 8 T; 0 U; 0 Other;
XX CC Query Match 14.2%; Score 10.4; DB 1; Length 13;
XX CC Best Local Similarity 91.7%; Pred. No. 9e+02;
XX CC Mismatches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX QY 918 TCTTTGCCCTTT 929
XX DB ||||| |||||
XX 2 TCTTTGCCCTTT 13
XX RESULT 476
XX ABF23706
XX ID ABF23706 standard; DNA; 13 BP.
XX AC ABF23706;
XX DT 21-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 123703 for detecting SNP TSC0030930.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX FN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
```

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 123703; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 2 A; 0 C; 2 G; 9 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

907 ATTTCCTTGGT 918
|||||
1 ATTTTCTTGGT 12

RESULT 477
ABF40512
ABF40512 standard; DNA; 13 BP.

ABF40512;
21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 140509 for detecting SNP TSC0035223.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 140509; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The

CC oligomers are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 1 A; 0 C; 3 G; 9 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;

Best Local Similarity 91.7%; Pred. No. 9e+02; Mismatches 1; Indels 0; Gaps 0;

907 ATTTCCTTGGT 918

|||||

2 ATTTTCTTGGT 13

RESULT 478

ABF99637/c

ID ABF99637 standard; DNA; 13 BP.

AC ABF99637;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 199634 for detecting SNP TSC0049113.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 199634; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;

Best Local Similarity 91.7%; Pred. No. 9e+02; Mismatches 1; Conservative 0; Gaps 0;

```

QY 943 ATTGGTTTAATG 954
  ||| ||| ||| ||| |||
Db 12 ATTGGTTTAATG 1

RESULT 479
ABH04824
-D ABH04824 standard; DNA; 13 BP.
AC ABH04824;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 204801 for detecting SNP TSC0050236.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
CS Homo sapiens.
XX
EN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
FF 06-APR-2001; 2001WO-IB000713.
XX
ER 07-APR-2000; 2000DE-01019173.
XX
FA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 204801; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 4 A; 1 C; 3 G; 5 T; 0 U; 0 Other;
XX
Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 948 TTTAATGATATCG 959
  ||| ||| ||| ||| |||
Db 2 TGTATGATATCG 13

RESULT 480
ABH56098
ID ABH56098 standard; DNA; 13 BP.
XX
AC ABH56098;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 204801 for detecting SNP TSC0050236.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
CS Homo sapiens.
XX
EN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
FF 06-APR-2001; 2001WO-IB000713.
XX
ER 07-APR-2000; 2000DE-01019173.
XX
FA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 204801; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 4 A; 1 C; 3 G; 5 T; 0 U; 0 Other;
XX
Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```

```

DE Oligonucleotide SEQ ID NO 256075 for detecting SNP TSC0062396.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 256075; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 1 A; 0 C; 2 G; 10 T; 0 U; 0 Other;
XX
Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 907 ATTTCCTTTGGT 918
  ||| ||| ||| ||| |||
Db 1 ATTTTCTTTGGT 12

RESULT 481
ABC74753/C
ID ABC74753 standard; DNA; 13 BP.
XX
AC ABC74753;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 74770 for detecting SNP TSC0019203.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.

```

07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
Claim 1; SEQ ID NO 74770; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 9 A; 3 C; 0 G; 1 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
944 TTGGTTTAATGT 955
|||||
13 TTGGTTTAATGT 2
RESULT 482
IC50230
ABC50230 standard; DNA; 13 BP.
ABC50230;
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 50247 for detecting SNP TSC0014136.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB0000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

PS Claim 1; SEQ ID NO 50247; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX Sequence 13 BP; 4 A; 0 C; 2 G; 7 T; 0 U; 0 Other;
SQ Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 946 GGTTTAATGTAT 957
Db 2 GGTTTAATTTAT 13
|||||
RESULT 483
ABF09634
ID ABF09634 standard; DNA; 13 BP.
XX
AC ABF09634;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 109631 for detecting SNP TSC0027422.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB0000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
PT
PT methylation status.
XX
PS Claim 1; SEQ ID NO 109631; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at

```

CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 2 A; 0 C; 2 G; 9 T; 0 U; 0 Other;

  Query Match      14.2%; Score 10.4; DB 1; Length 13;
  Best Local Similarity 91.7%; Pred. No. 9e+02;
  Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 944 TTGGTTTAATGT 955
Db 1 TTGTTTAATGT 12

RESULT 484
ABF09635/c
ID ABF09635 standard; DNA; 13 BP.
XX
AC ABF09635;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 109632 for detecting SNP TSC0027422.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
PI WPI; 2001-657177/75.
XX
DR Set of oligonucleotides, useful for diagnosis and cell typing, is
DR designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 109632; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 9 A; 2 C; 0 G; 2 T; 0 U; 0 Other;

  Query Match      14.2%; Score 10.4; DB 1; Length 13;
  Best Local Similarity 91.7%; Pred. No. 9e+02;
  Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 944 TTGGTTTAATGT 955
Db 13 TTGTTTAATGT 2

RESULT 484
ABF09635/c
ID ABF09635 standard; DNA; 13 BP.
XX
AC ABF09635;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 109632 for detecting SNP TSC0034209.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
PI WPI; 2001-657177/75.
XX
DR Set of oligonucleotides, useful for diagnosis and cell typing, is
DR designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 109632; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 3 A; 0 C; 4 G; 6 T; 0 U; 0 Other;

  Query Match      14.2%; Score 10.4; DB 1; Length 13;
  Best Local Similarity 91.7%; Pred. No. 9e+02;
  Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 946 GGTTTAATGTAT 957
Db 1 GGTTTAATGTAT 12

RESULT 486
ABF36891/c
ID ABF36891 standard; DNA; 13 BP.
XX
AC ABF36891;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 136888 for detecting SNP TSC0034209.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

```

PI Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 242332; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02; Mismatches 0; Gaps 0;
Matches 11; Conservative 0; Indels 1; Indels 0; Gaps 0;
QY 945 TGGTTTAATGTA 956
Db 13 TGGTTTAATGTA 2
RESULT 488
ABH45260/c
ID ABH45260 standard; DNA; 13 BP.
XX AC ABH45260;
XX AC ABH45260;
XX AC ABH45260;
DT 22-FEB-2002 (first entry)
XX Oligonucleotide SEQ ID NO 245237 for detecting SNP TSC0005865.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 245237; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX

Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 136888; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 6 A; 3 C; 0 G; 4 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02; Mismatches 0; Gaps 0;
Matches 11; Conservative 0; Indels 1; Indels 0; Gaps 0;
/ 941 TCATTGGTTTAA 952
/ 12 TAATTGGTTTAA 1
RESULT 487
BH42355/c
D ABH42355 standard; DNA; 13 BP.
C ABH42355;
C ABH42355;
T 22-FEB-2002 (first entry)
K Oligonucleotide SEQ ID NO 242332 for detecting SNP TSC0059098.
X SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
X peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
X central nervous system; gastrointestinal; respiratory; immune; metabolic.
X Homo sapiens.
X WO200177384-A2.
X 18-OCT-2001.
X 06-APR-2001; 2001WO-IB000713.
X 07-APR-2000; 2000DE-01019173.
X (EPIG-) EPIGENOMICS AG.
X

CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX

SQ Sequence 13 BP; 4 A; 0 C; 9 G; 0 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;
 Best Local Similarity 91.7%; Pred. No. 9e+02;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 931 TCCCTCCTCTTC 942
 DB 12 TCCCTCCTCTTC 1

RESULT 489
 ABH47936/C
 ID ABH47936 standard; DNA; 13 BP.

XX AC ABH47936;
 XX
 XX
 XX 22-FEB-2002 (first entry)
 XX
 XX Oligonucleotide SEQ ID NO 247913 for detecting SNP TSC0060587.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX

CS Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.

XX Claim 1; SEQ ID NO 247913; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX

SQ Sequence 13 BP; 3 A; 0 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;

Best Local Similarity 91.7%; Pred. No. 9e+02;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 932 CCTCTCTCTTCA 943
 DB 12 CCTCTCTCTTCA 1

RESULT 490
 ABH50149/C
 ID ABH50149 standard; DNA; 13 BP.

XX AC ABH50149;

XX 22-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 250126 for detecting SNP TSC0061075.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX

OS Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.

XX Claim 1; SEQ ID NO 250126; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX

SQ Sequence 13 BP; 7 A; 2 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;

Best Local Similarity 91.7%; Pred. No. 9e+02;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 941 TCATTGGTTTAA 952
 DB 13 TCATTGGTTTAA 2

RESULT 491
 ABC52085
 ID ABC52085 standard; DNA; 13 BP.

XX AC ABC52085;

PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.

XX Claim 1; SEQ ID NO 9463; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 5 A; 0 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;

Best Local Similarity 91.7%; Pred. No. 9e+02; Length 13;

Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 924 CCTTTATCCCT 935

Db 13 CCTTTATCCCT 2

RESULT 494

ABC64765

ID ABC64765 standard; DNA; 13 BP.

XX ABC64765;

XX ABC64765;

XX 21-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 64782 for detecting SNP TSC0017078.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;

XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.

XX Claim 1; SEQ ID NO 64782; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073

CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 0 A; 5 C; 0 G; 8 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;

Best Local Similarity 91.7%; Pred. No. 9e+02; Length 13;

Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 926 TTTTATCCCTCC 937

Db 2 TTTTATCCCTCC 13

RESULT 495

ABC36749

ID ABC36749 standard; DNA; 13 BP.

XX ABC36749;

XX ABC36749;

XX 20-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 36766 for detecting SNP TSC0011511.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.

XX Claim 1; SEQ ID NO 36766; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 1 A; 4 C; 0 G; 8 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;

Best Local Similarity 91.7%; Pred. No. 9e+02; Length 13;

Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 918 TCTTTGCTTTT 929

|||||

```

2 TCTTTACCTTT 13
RESULT 496
IC64764/c
ABC64764 standard; DNA; 13 BP.
ABC64764;
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 64781 for detecting SNP TSC0017078.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 64781; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 8 A; 0 C; 5 G; 0 T; 0 U; 0 Other;
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
926 TTTTATCCCTCC 937
|||||
12 TTTTATCCCTCC 1
RESULT 497
3F50858/c
D ABF50858 standard; DNA; 13 BP.
ABF50858;
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 150855 for detecting SNP TSC0038073.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 150855; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
928 TTATCCCTCCTC 939
|||||
13 TTATCCATCCTC 2
RESULT 498
ABF50861
ID ABF50861 standard; DNA; 13 BP.
ABF50861;
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 150858 for detecting SNP TSC0038073.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.

```

XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 150858; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 1 A; 6 C; 0 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 14.2%; Score 10.4; DB 1; Length 13;
XX Best Local Similarity 91.7%; Pred. No. 9e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 928 TTATCCCTCCCTC 939
XX Db 1 TTATCCCTCCCTC 12
XX
XX RESULT 499
XX ABH03631/c
XX ID ABH03631 standard; DNA; 13 BP.
XX AC ABH03631;
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 203608 for detecting SNP TSC0049987.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 203608; 29pp + Sequence Listing; German.
XX

CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 6 A; 3 C; 0 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 14.2%; Score 10.4; DB 1; Length 13;
XX Best Local Similarity 91.7%; Pred. No. 9e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 948 TTTAATGTATCG 959
XX Db 13 TTTAATGTATAG 2
XX
XX RESULT 500
XX ABH34475/c
XX ID ABH34475 standard; DNA; 13 BP.
XX AC ABH34475;
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 234452 for detecting SNP TSC0057216.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 234452; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX

```
} Sequence 13 BP; 8 A; 2 C; 0 G; 3 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02; 1; Indels 0; Gaps 0;
Matches 11; Conservative 0; Mismatches 0;

/ 943 ATTGGTTTAATG 954
|||||
) 12 ATTGTTTAAATG 1

RESULT 501
3F91623/c
) ABF91623 standard; DNA; 13 BP.
(
( ABF91623;
(
( 22-FEB-2002 (first entry)
(
( Oligonucleotide SEQ ID NO 191620 for detecting SNP TSC0001421.
(
( SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
( peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
( central nervous system; gastrointestinal; respiratory; immune; metabolic.
(
( Homo sapiens.
( WO200177384-A2.
(
( 18-OCT-2001.
(
( 06-APR-2001; 2001WO-IB000713.
(
( 07-APR-2000; 2000DE-01019173.
(
( (EPIG-) EPIGENOMICS AG.
( Olek A, Piepenbrock C, Berlin K;
( WPI; 2001-657177/75.
(
( Set of oligonucleotides, useful for diagnosis and cell typing, is
( designed to detect single-nucleotide polymorphisms and cytosine
( methylation status.
(
( Claim 1; SEQ ID NO 191620; 29pp + Sequence Listing; German.
(
( This invention describes novel oligonucleotide primers or peptide nucleic
( acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
( and cytosine methylation status in chemically pretreated genomic DNA. The
( oligonucleotides are used for diagnosis and/or prognosis of cancer and a
( range of diseases including immune system, gastrointestinal, respiratory,
( central nervous system, cardiovascular and metabolic disorders. The
( oligomers are also used for detecting cell type differentiation. ABC00010
( -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
( represent the oligomers described in the invention. NOTE: The sequence
( data for this patent did not form part of the printed specification, but
( was obtained in electronic format from WIPO at
( ftp.wipo.int/pub/published_pct_sequences
(
( Claim 1; SEQ ID NO 191620; 29pp + Sequence Listing; German.
(
( This invention describes novel oligonucleotide primers or peptide nucleic
( acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
( and cytosine methylation status in chemically pretreated genomic DNA. The
( oligonucleotides are used for diagnosis and/or prognosis of cancer and a
( range of diseases including immune system, gastrointestinal, respiratory,
( central nervous system, cardiovascular and metabolic disorders. The
( oligomers are also used for detecting cell type differentiation. ABC00010
( -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
( represent the oligomers described in the invention. NOTE: The sequence
( data for this patent did not form part of the printed specification, but
( was obtained in electronic format from WIPO at
( ftp.wipo.int/pub/published_pct_sequences
(
( Sequence 13 BP; 8 A; 3 C; 0 G; 2 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02; 1; Indels 0; Gaps 0;
Matches 11; Conservative 0; Mismatches 0;

/ 940 TTCATTGGTTTA 951
|||||
) 12 TTGATTGGTTTA 1

RESULT 502
3H56099/c
} Sequence 13 BP; 8 A; 2 C; 0 G; 1 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02; 1; Indels 0; Gaps 0;
Matches 11; Conservative 0; Mismatches 0;

QY 907 ATTTCCTTTGGT 918
|||||
Db 13 ATTTTCTTTGGT 2

RESULT 503
ABC44103/c
ID ABC44103 standard; DNA; 13 BP.
XX
XX ABC44103;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 44120 for detecting SNP TSC0012979.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
```

```

XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 44120; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 14.2%; Score 10.4; DB 1; Length 13;
XX Best Local Similarity 91.7%; Pred. No. 9e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 945 TGGTTTAAATGTA 956
XX Db 12 TGGTTTAAATGTA 1
XX
XX RESULT 504
XX ABF11630
XX ID ABF11630 standard; DNA; 13 BP.
XX
XX AC ABF11630;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 111627 for detecting SNP TSC0027874.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX

```

```

DR WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 111627; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 1 A; 1 C; 2 G; 9 T; 0 U; 0 Other;
XX
XX Query Match 14.2%; Score 10.4; DB 1; Length 13;
XX Best Local Similarity 91.7%; Pred. No. 9e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 920 TTTCCTTTTAT 931
XX Db 2 TTTCCTTTTAT 13
XX
XX RESULT 505
XX ABF36473/c
XX ID ABF36473 standard; DNA; 13 BP.
XX
XX AC ABF36473;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 136470 for detecting SNP TSC0034103.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 136470; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX

```

central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 6 A; 4 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;

Best Local Similarity 91.7%; Pred. No. 9e+02; 1; Indels 0; Gaps 0;

Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

946 GCTTTAATGAT 957

|||||

13 GCTTTGATGAT 2

RESULT 506

3F40515/C

ABF40515 standard; DNA; 13 BP.

ABF40515;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 140512 for detecting SNP TSC0035223.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 140512; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 9 A; 2 C; 0 G; 2 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;

Best Local Similarity 91.7%; Pred. No. 9e+02; 1; Indels 0; Gaps 0;

Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 907 ATTTCTTTGGT 918

|||||

12 ATTTATTGGT 1

RESULT 507

ABH24395/C

ID ABH24395 standard; DNA; 13 BP.

AC ABH24395;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 224372 for detecting SNP TSC0054668.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 224372; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 7 A; 2 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;

Best Local Similarity 91.7%; Pred. No. 9e+02; 1; Indels 0; Gaps 0;

Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 945 TGGTTTAATGTA 956

|||||

13 TGGTTTAATGTA 2

RESULT 508

ABF78890

ID ABF78890 standard; DNA; 13 BP.

AC ABF78890;

22-FEB-2002 (first entry)


```

XX DE Oligonucleotide SEQ ID NO 178887 for detecting SNP TSC0044302.
XX XX
XX XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX XX
XX XX WO200177384-A2.
XX XX
XX XX 18-OCT-2001.
XX XX
XX XX 06-APR-2001; 2001WO-IB000713.
XX XX
XX XX 07-APR-2000; 2000DE-01019173.
XX XX
XX XX (EPIG-) EPIGENOMICS AG.
XX XX
XX XX Olek A, Piepenbrock C, Berlin K;
XX XX
XX XX WPI; 2001-657177/75.
XX XX
XX XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX XX designed to detect single-nucleotide polymorphisms and cytosine
XX XX methylation status.
XX XX
XX XX Claim 1; SEQ ID NO 178887; 29pp + Sequence Listing; German.
XX XX
XX XX This invention describes novel oligonucleotide primers or peptide nucleic
XX XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX XX range of diseases including immune system, gastrointestinal, respiratory,
XX XX central nervous system, cardiovascular and metabolic disorders. The
XX XX oligomers are also used for detecting cell type differentiation. ABC00010
XX XX -ABF85739, ABF85739, ABH00010-ABH99989 and ABH00010-ABH82073
XX XX represent the oligomers described in the invention. NOTE: The sequence
XX XX data for this patent did not form part of the printed specification, but
XX XX was obtained in electronic format from WIPO at
XX XX ftp.wipo.int/pub/published_pct_sequences
XX XX
XX XX Sequence 13 BP; 2 A; 0 C; 4 G; 7 T; 0 U; 0 Other;
XX XX
XX XX Query Match 14.2%; Score 10.4; DB 1; Length 13;
XX XX Best Local Similarity 91.7%; Pred. No. 9e+02;
XX XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX XX
XX XX QY 945 TGGTTTAAATGTA 956
XX XX ||||| |||||
XX XX 1 TGGTTTAAATGTA 12
XX XX
XX XX RESULT 509
XX XX ABF85739
XX XX ID ABF85739 standard; DNA; 13 BP.
XX XX
XX XX AC ABF85739;
XX XX
XX XX 22-FEB-2002 (first entry)
XX XX
XX XX Oligonucleotide SEQ ID NO 185736 for detecting SNP TSC0045780.
XX XX
XX XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX XX
XX XX Homo sapiens.
XX XX
XX XX WO200177384-A2.
XX XX
XX XX 18-OCT-2001.
XX XX
XX XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX XX designed to detect single-nucleotide polymorphisms and cytosine
XX XX methylation status.

```

```

PF 06-APR-2001; 2001WO-IB000713.
XX XX
XX 07-APR-2000; 2000DE-01019173.
XX XX
XX (EPIG-) EPIGENOMICS AG.
XX XX
XX Olek A, Piepenbrock C, Berlin K;
XX XX
XX WPI; 2001-657177/75.
XX XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX XX designed to detect single-nucleotide polymorphisms and cytosine
XX XX methylation status.
XX XX
XX PS Claim 1; SEQ ID NO 185736; 29pp + Sequence Listing; German.
XX XX
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABH00010-ABH82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX XX
XX XX Sequence 13 BP; 3 A; 3 C; 1 G; 6 T; 0 U; 0 Other;
XX XX
XX XX Query Match 14.2%; Score 10.4; DB 1; Length 13;
XX XX Best Local Similarity 91.7%; Pred. No. 9e+02;
XX XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX XX
XX XX QY 942 CATTCGTTTAAAT 953
XX XX ||||| |||||
XX XX 2 CATTCGTTTAAAT 13
XX XX
XX XX Db
XX XX
XX XX RESULT 510
XX XX ABH14931/c
XX XX ID ABH14931 standard; DNA; 13 BP.
XX XX
XX XX AC ABH14931;
XX XX
XX XX 22-FEB-2002 (first entry)
XX XX
XX XX Oligonucleotide SEQ ID NO 214908 for detecting SNP TSC0052298.
XX XX
XX XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX XX
XX XX Homo sapiens.
XX XX
XX XX WO200177384-A2.
XX XX
XX XX 18-OCT-2001.
XX XX
XX XX 06-APR-2001; 2001WO-IB000713.
XX XX
XX XX 07-APR-2000; 2000DE-01019173.
XX XX
XX XX (EPIG-) EPIGENOMICS AG.
XX XX
XX XX Olek A, Piepenbrock C, Berlin K;
XX XX
XX XX WPI; 2001-657177/75.
XX XX
XX XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX XX designed to detect single-nucleotide polymorphisms and cytosine
XX XX methylation status.

```

Claim 1; SEQ ID NO 214908; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 8 A; 2 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02; 1; Indels 0; Gaps 0;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

946 GGTGTTAATGAT 957
13 GTTGTGTTAATGAT 2

RESULT 511

ABC69764
ABC69764 standard; DNA; 13 BP.

ABC69764;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 69781 for detecting SNP TSC0018173.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB0000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 69781; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but

CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

SQ Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 943 ATTGTTTAAAG 954

1 ATTGTTTAAAG 12

RESULT 512

ABC52084/C

ID ABC52084 standard; DNA; 13 BP.

ABC52084;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 52101 for detecting SNP TSC0014496.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB0000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 52101; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 7 A; 0 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02; 1; Indels 0; Gaps 0;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 934 CTCTCTCTCAT 945

13 CTCTCTCTCAT 2

```

RESULT 513
ABC05074
ID ABC05074 standard; DNA; 13 BP.
XX
AC ABC05074;
XX
DT 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 5065 for detecting SNP TSC0001763.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
FN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PE 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
PI WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 5065; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 4 A; 0 C; 4 G; 5 T; 0 U; 0 Other;
XX
Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 946 GGTTTAATGTAT 957
Db 1 GGTTTAATGGAT 12

RESULT 514
ABF11631/c
ID ABF11631 standard; DNA; 13 BP.
XX
AC ABF11631;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 111628 for detecting SNP TSC0027874.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

```

```

KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
FN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PE 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
PI WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 111628; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 9 A; 2 C; 1 G; 1 T; 0 U; 0 Other;
XX
Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 920 TTTCCTTTTAT 931
Db 12 TTTCGTTTAT 1

RESULT 515
ABC36748/c
ID ABC36748 standard; DNA; 13 BP.
XX
AC ABC36748;
XX
DT 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 36765 for detecting SNP TSC0011511.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
FN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PE 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.

```

Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
Claim 1; SEQ ID NO 36765; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABH00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 8 A; 0 C; 4 G; 1 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02; Mismatches 0; Indels 0; Gaps 0;
Matches 11; Conservative 0;
918 TCTTTGCCCTTT 929
12 TCTTACCTTT 1
RESULT 516
BH35544
ABH35544 standard; DNA; 13 BP.
ABH35544;
22-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 235521 for detecting SNP TSC0057502.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
Claim 1; SEQ ID NO 235521; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABH00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 2 A; 0 C; 4 G; 7 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02; Mismatches 0; Indels 0; Gaps 0;
Matches 11; Conservative 0;
944 TTGGTTTAAATGT 955
2 TTGGTTTAAATGT 13
Db
RESULT 517
ABF91622
ID ABF91622 standard; DNA; 13 BP.
XX
AC ABF91622;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 191619 for detecting SNP TSC0001421.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
XX
PS Claim 1; SEQ ID NO 191619; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABH00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 2 A; 0 C; 3 G; 8 T; 0 U; 0 Other;

```
Query Match          14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 940 TTCATTGGTTTA 951
DB 2 TTGATTGGTTTA 13

RESULT 518
ABC45674/c
ID ABC45674 standard; DNA; 13 BP.
AC
XX
AC ABC45674;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 45691 for detecting SNP TSC0013289.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
PI WPI; 2001-657177/75.
DR
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 45691; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 6 A; 0 C; 4 G; 3 T; 0 U; 0 Other;

Query Match          14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 926 TTTTATCCTCC 937
DB 12 TTTTATACCTCC 1

RESULT 519
ABF40513/c
ID ABF40513 standard; DNA; 13 BP.
XX
```

```
AC ABF40513;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 140510 for detecting SNP TSC0035223.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
PI WPI; 2001-657177/75.
DR
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 140510; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 9 A; 3 C; 0 G; 1 T; 0 U; 0 Other;

Query Match          14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 907 ATTTTCTTTGGT 918
DB 12 ATTTTGTTTGGT 1

RESULT 520
ABH23547/c
ID ABH23547 standard; DNA; 13 BP.
XX
AC ABH23547;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 223524 for detecting SNP TSC0010846.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
```

18-OCT-2001.
06-APR-2001; 2001WO-IB0000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
Claim 1; SEQ ID NO 223524; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI92073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 8 A; 2 C; 0 G; 3 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02; 1; Indels 0; Gaps 0;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
940 TTGATTGGTTTA 951
|| |||||
12 TTTATTGGTTTA 1
RESULT 521
BH24394
D ABH24394 standard; DNA; 13 BP.
K
C ABH24394;
X
T 22-FEB-2002 (first entry)
X
E Oligonucleotide SEQ ID NO 243371 for detecting SNP TSC0054668.
X
W SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
W peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
W central nervous system; gastrointestinal; respiratory; immune; metabolic.
X
S Homo sapiens.
X
N WO200177384-A2.
N
D 18-OCT-2001.
D
F 06-APR-2001; 2001WO-IB0000713.
X
X 07-APR-2000; 2000DE-01019173.
X
A (EPIG-) EPIGENOMICS AG.
X
I Olek A, Piepenbrock C, Berlin K;
X
R WPI; 2001-657177/75.
X

PT Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
PT
XX Claim 1; SEQ ID NO 224371; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI92073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 4 A; 0 C; 2 G; 7 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02; 1; Indels 0; Gaps 0;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
945 TGGTTTAATGTA 956
|| |||||
1 TGGTTTAATGTA 12
Db
RESULT 522
ABF55253/c
ID ABF55253 standard; DNA; 13 BP.
XX
AC ABF55253;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 155250 for detecting SNP TSC0039210.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB0000713.
XX
FR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
PT
XX Claim 1; SEQ ID NO 155250; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI92073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX

```

CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 8 A; 3 C; 0 G; 2 T; 0 U; 0 Other;

  Query Match      14.2%; Score 10.4; DB 1; Length 13;
  Best Local Similarity 91.7%; Pred. No. 9e+02;
  Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 946 GGTTTAATGAT 957
Gb 13 GGTTTAATGTTT 2

RESULT 523
ABH34474
ID ABH34474 standard; DNA; 13 BP.
XX
AC ABH34474;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 234451 for detecting SNP TSC0057216.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
WPI; 2001-657177/75.
XX
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
XX
Claim 1; SEQ ID NO 234451; 29pp + Sequence Listing; German.
XX
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 U; 0 Other;

  Query Match      14.2%; Score 10.4; DB 1; Length 13;
  Best Local Similarity 91.7%; Pred. No. 9e+02;
  Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 943 ATTGGTTTAATG 954

```

```

Db      ||||| ||||| |||||
        2 ATTGTTTAAATG 13

RESULT 524
ABH14930
ID ABH14930 standard; DNA; 13 BP.
XX
AC ABH14930;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 214907 for detecting SNP TSC0052298.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
WPI; 2001-657177/75.
XX
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
XX
Claim 1; SEQ ID NO 214907; 29pp + Sequence Listing; German.
XX
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 U; 0 Other;

  Query Match      14.2%; Score 10.4; DB 1; Length 13;
  Best Local Similarity 91.7%; Pred. No. 9e+02;
  Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 946 GGTTTAATGAT 957
Db 1 GTTTTAAATGAT 12

RESULT 525
ABH46806/c
ID ABH46806 standard; DNA; 13 BP.
XX
AC ABH46806;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 246783 for detecting SNP TSC0060316.

```


XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;

XX Query Match 14.2%; Score 10.4; DB 1; Length 13;

XX Best Local Similarity 91.7%; Pred. No. 9e+02;

XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 943 ATTGTTTAATG 954

DB 13 ATTGTTTAATG 2

RESULT 528

ABC99594

ID ABC99594 standard; DNA; 13 BP.

XX ABC99594;

XX 21-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 99611 for detecting SNP TSC0024745.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;

XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

XX Claim 1; SEQ ID NO 99611; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 13 BP; 3 A; 0 C; 4 G; 6 T; 0 U; 0 Other;

XX Query Match 14.2%; Score 10.4; DB 1; Length 13;

XX Best Local Similarity 91.7%; Pred. No. 9e+02;

XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 945 TCGTTTAATGTA 956

DB 1 TCGTTTAATGTA 12

RESULT 529

ABC35286

ID ABC35286 standard; DNA; 13 BP.

XX ABC35286;

XX 20-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 35303 for detecting SNP TSC0011189.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;

XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

XX Claim 1; SEQ ID NO 35303; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 13 BP; 4 A; 0 C; 2 G; 7 T; 0 U; 0 Other;

XX Query Match 14.2%; Score 10.4; DB 1; Length 13;

XX Best Local Similarity 91.7%; Pred. No. 9e+02;

XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 946 GGTTTTAATGTA 957

DB 1 GTTTTAATGTA 12

RESULT 530

```

F040514
ABF40514 standard; DNA; 13 BP.
ABF40514;
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 140511 for detecting SNP TSC0035223.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 140511; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 2 A; 0 C; 2 G; 9 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Y 907 ATTTCCTTCGT 918
b 2 ATTTCATTGCT 13
|||||
RESULT 531
BH19337/C
D ABH19337 standard; DNA; 13 BP.
X C ABH19337;
X 22-FEB-2002 (first entry)
X Oligonucleotide SEQ ID NO 219314 for detecting SNP TSC0053330.
X SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
X peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
X central nervous system; gastrointestinal; respiratory; immune; metabolic.
X

```

```

OS Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 219314; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 13 BP; 5 A; 3 C; 0 G; 5 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 946 GGTTCATTGCT 957
Db 12 GGTTCATTGCT 1
|||||
RESULT 532
ABF50862/C
ID ABF50862 standard; DNA; 13 BP.
XX AC ABF50862;
XX 21-FEB-2002 (first entry)
XX Oligonucleotide SEQ ID NO 150859 for detecting SNP TSC0038073.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX OS Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;

```



```
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
    945 TGGTTTAATGTA 956
    ||||| |||
    13 TGGTTTAATGTA 2

RESULT 535
ABF85738/c
ABF85738 standard; DNA; 13 BP.
ABF85738;
22-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 185735 for detecting SNP TSC0045780.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 185735; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI02073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 6 A; 1 C; 3 G; 3 T; 0 U; 0 Other;
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI02073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 6 A; 1 C; 3 G; 3 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Y 942 CATTGTTTAAT 953
||| |||||
12 CATTGTTTAAT 1

RESULT 536
BH38188/c
BH38188 standard; DNA; 13 BP.
X ABH38188
X ABH38188;
X
```

```
DT 22-FEB-2002 (first entry)
XX Oligonucleotide SEQ ID NO 238165 for detecting SNP TSC0058074.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 238165; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI02073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX Sequence 13 BP; 7 A; 0 C; 5 G; 1 T; 0 U; 0 Other;
XX Query Match 14.2%; Score 10.4; DB 1; Length 13;
XX Best Local Similarity 91.7%; Pred. No. 9e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 934 CTCCTCTTCATT 945
||| |||||
Db 13 CTCCTCTTCATT 2

RESULT 537
ABH45261
ID ABH45261 standard; DNA; 13 BP.
XX AC ABH45261;
XX 22-FEB-2002 (first entry)
XX Oligonucleotide SEQ ID NO 245238 for detecting SNP TSC0005865.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
```

```

XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX PS Claim 1; SEQ ID NO 245238; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF0010-ABF99989, ABH0010-ABH99989 and ABI0010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 0 A; 9 C; 0 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 14.2%; Score 10.4; DB 1; Length 13;
XX Best Local Similarity 91.7%; Pred. No. 9e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
Cy 931 TCCCTCCCTTC 942
Db 2 TCCCTCCCTTC 13
||||| |||||
||||| |||||

RESULT 538
ABC19742
ID ABC19742 standard; DNA; 13 BP.
XX AC ABC19742;
XX DT 20-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 19759 for detecting SNP TSC0004086.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PM WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine

```

```

PT methylation status.
XX Claim 1; SEQ ID NO 19759; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF0010-ABF99989, ABH0010-ABH99989 and ABI0010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 14.2%; Score 10.4; DB 1; Length 13;
XX Best Local Similarity 91.7%; Pred. No. 9e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
Cy 940 TTCATTGGTTTA 951
Db 1 TTCATTGGTTTA 12
||||| |||||
||||| |||||

RESULT 539
ABC45675
ID ABC45675 standard; DNA; 13 BP.
XX AC ABC45675;
XX DT 21-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 45692 for detecting SNP TSC0013289.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PM WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX PS Claim 1; SEQ ID NO 45692; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF0010-ABF99989, ABH0010-ABH99989 and ABI0010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence

```

data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 3 A; 4 C; 0 G; 6 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

926 TTTTATCCCTCC 937
||||| |||||
2 TTTTATCTCC 13

RESULT 540

3C74752
ABC74752 standard; DNA; 13 BP.

ABC74752;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 74769 for detecting SNP TSC0019203.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 74769; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 1 A; 0 C; 3 G; 9 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

944 TTGGTTTATGCT 955

||||| |||||

1 TTGGTTTATGCT 12

RESULT 541

ABC34962/c
ID ABC34962 standard; DNA; 13 BP.

XX ABC34962;

20-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 34979 for detecting SNP TSC0011109.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 34979; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 6 A; 0 C; 4 G; 2 T; 0 U; 1 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

927 TTTTATCCCTCC 938

||||| |||||

12 TTTTATCCCTCAT 1

RESULT 542

ABC35287/c
ID ABC35287 standard; DNA; 13 BP.

XX ABC35287;

20-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 35304 for detecting SNP TSC0011189.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 OS Homo sapiens.
 OS WO200177384-A2.
 PN 18-OCT-2001.
 XX 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 PI WPI; 2001-657177/75.
 DR Set of oligonucleotides, useful for diagnosis and cell typing, is
 XX designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 PT Claim 1; SEQ ID NO 35304; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF0010-ABF99989, ABH0010-ABH99989 and AB10010-AB182073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 7 A; 2 C; 0 G; 4 T; 0 U; 0 Other;
 Query Match 14.2%; Score 10.4; DB 1; Length 13;
 Best Local Similarity 91.7%; Pred. No. 9e+02;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 946 GGTTAATGAT 957
 Db 13 GTTTTAATGAT 2
 RESULT 543
 ABF41200
 ID ABF41200 standard; DNA; 13 BP.
 XX
 AC ABF41200;
 XX 21-FEB-2002 (first entry)
 XX Oligonucleotide SEQ ID NO 141197 for detecting SNP TSC0035399.
 DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 DE peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 DE central nervous system; gastrointestinal; respiratory; immune; metabolic.
 OS Homo sapiens.
 OS WO200177384-A2.
 PN 18-OCT-2001.
 XX 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 PI WPI; 2001-657177/75.
 DR Set of oligonucleotides, useful for diagnosis and cell typing, is
 XX designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 PT Claim 1; SEQ ID NO 168451; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic

PA (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 DR Set of oligonucleotides, useful for diagnosis and cell typing, is
 XX designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 PT Claim 1; SEQ ID NO 141197; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF0010-ABF99989, ABH0010-ABH99989 and AB10010-AB182073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 U; 0 Other;
 Query Match 14.2%; Score 10.4; DB 1; Length 13;
 Best Local Similarity 91.7%; Pred. No. 9e+02;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 943 ATTGGTTTAATG 954
 Db 2 ATTTGTTTAATG 13
 RESULT 544
 ABF68454
 ID ABF68454 standard; DNA; 13 BP.
 XX
 AC ABF68454;
 XX 22-FEB-2002 (first entry)
 XX Oligonucleotide SEQ ID NO 168451 for detecting SNP TSC0042131.
 DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 DE peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 DE central nervous system; gastrointestinal; respiratory; immune; metabolic.
 OS Homo sapiens.
 OS WO200177384-A2.
 PN 18-OCT-2001.
 XX 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 PI WPI; 2001-657177/75.
 DR Set of oligonucleotides, useful for diagnosis and cell typing, is
 XX designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 PT Claim 1; SEQ ID NO 168451; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic

acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 4 A; 0 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

941 TCATTGGTTTAA 952

1 TAATTGGTTTAA 12

RESULT 545

ABF95990/C
ABF95990 standard; DNA; 13 BP.

ABF95990;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 195987 for detecting SNP TSC0048213.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 195987; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 4 A; 0 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 932 CCTCTCTCTTCA 943

DB 12 CCTCATCTTCA 1

RESULT 546

ABF95991
ABF95991 standard; DNA; 13 BP.

ABF95991;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 195988 for detecting SNP TSC0048213.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 195988; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 2 A; 7 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 932 CCTCTCTCTTCA 943

DB 2 CCTCATCTTCA 13

RESULT 547

ABF95994/C
ABF95994 standard; DNA; 13 BP.


```

XX ABF95994;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 195991 for detecting SNP TSC0048213.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 195991; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABF99989, ABF0010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 4 A; 1 C; 7 G; 1 T; 0 U; 0 Other;
XX
XX Query Match 14.2%; Score 10.4; DB 1; Length 13;
XX Best Local Similarity 91.7%; Pred. No. 9e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 932 CCCTCCCTCTCA 943
XX ||||| |||||
XX 12 CCCTCGCTCTCA 1
XX
XX RESULT 548
XX ABH23546
XX ID ABH23546 standard; DNA; 13 BP.
XX
XX AC ABH23546;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 223523 for detecting SNP TSC0010846.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX

```

```

PN WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 223523; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABF99989, ABF0010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 14.2%; Score 10.4; DB 1; Length 13;
XX Best Local Similarity 91.7%; Pred. No. 9e+02;
XX Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 940 TTCATTGCTTTA 951
XX ||||| |||||
XX 2 TTTATTGCTTTA 13
XX
XX RESULT 549
XX ABF73677
XX ID ABF73677 standard; DNA; 13 BP.
XX
XX AC ABF73677;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 173674 for detecting SNP TSC0043251.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX

```

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 173674; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 1 A; 6 C; 0 G; 6 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02; 1; Indels 0; Gaps 0;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

924 CCTTTATCCCT 935
||| |||||
2 CCTTTATCCCT 13

RESULT 550

ABH00190
ID ABH00190 standard; DNA; 13 BP.

AC ABH00190;

DT 22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 200167 for detecting SNP TSC0049250.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 200167; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The

CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

SQ Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02; 1; Indels 0; Gaps 0;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 941 TCATTGGTTAA 952

Db 1 TTATTGGTTAA 12

RESULT 551

ABH00191/c

ID ABH00191 standard; DNA; 13 BP.

AC ABH00191;

DT 22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 200168 for detecting SNP TSC0049250.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 200168; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

SQ Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02; 1; Indels 0; Gaps 0;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;


```

07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 107410; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI92073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 1 A; 6 C; 0 G; 6 T; 0 U; 0 Other;
Query Match          14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred.No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0
y      924 CCTTTTATCCCT 935
c      2 CCTTCATCCCT 13
                ||||| |||||
RESULT 555
BF95995
ABF95995 standard; DNA; 13 BP.
X      X      X      X      X      X      X      X      X      X      X      X      X
C      C      C      C      C      C      C      C      C      C      C      C      C
K      K      K      K      K      K      K      K      K      K      K      K      K
I      I      I      I      I      I      I      I      I      I      I      I      I
T      T      T      T      T      T      T      T      T      T      T      T      T
E      E      E      E      E      E      E      E      E      E      E      E      E
X      X      X      X      X      X      X      X      X      X      X      X      X
X      X      X      X      X      X      X      X      X      X      X      X      X
W      W      W      W      W      W      W      W      W      W      W      W      W
M      M      M      M      M      M      M      M      M      M      M      M      M
W      W      W      W      W      W      W      W      W      W      W      W      W
X      X      X      X      X      X      X      X      X      X      X      X      X
W      W      W      W      W      W      W      W      W      W      W      W      W
X      X      X      X      X      X      X      X      X      X      X      X      X
S      S      S      S      S      S      S      S      S      S      S      S      S
Homo sapiens.
WO200177384-A2.
X      X      X      X      X      X      X      X      X      X      X      X      X
N      N      N      N      N      N      N      N      N      N      N      N      N
D      D      D      D      D      D      D      D      D      D      D      D      D
18-OCT-2001.
X      X      X      X      X      X      X      X      X      X      X      X      X
F      F      F      F      F      F      F      F      F      F      F      F      F
06-APR-2001; 2001WO-IB000713.
X      X      X      X      X      X      X      X      X      X      X      X      X
R      R      R      R      R      R      R      R      R      R      R      R      R
X      X      X      X      X      X      X      X      X      X      X      X      X
07-APR-2000; 2000DE-01019173.
X      X      X      X      X      X      X      X      X      X      X      X      X
(EPIG-) EPIGENOMICS AG.
X      X      X      X      X      X      X      X      X      X      X      X      X
A      A      A      A      A      A      A      A      A      A      A      A      A
Olek A, Piepenbrock C, Berlin K;
X      X      X      X      X      X      X      X      X      X      X      X      X
I      I      I      I      I      I      I      I      I      I      I      I      I
WPI; 2001-657177/75.
X      X      X      X      X      X      X      X      X      X      X      X      X
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.

```

```

CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 4 A; 0 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 948 TTTAATGATCG 959
Db 1 TTTAATGATAG 12

RESULT 557
ABF55252
ID ABF55252 standard; DNA; 13 BP.
XX
AC ABF55252;
XX
XX 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 155249 for detecting SNP TSC0039210.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 155249; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 2 A; 0 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 13;
Best Local Similarity 91.7%; Pred. No. 9e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 946 GGTTTAATGTTAT 957
Db 1 GGTTTAATGTTT 12

RESULT 559
ABH50148
ID ABH50148 standard; DNA; 13 BP.
XX
XX ABH50148;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 250125 for detecting SNP TSC0061075.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

```

```

1 Homo sapiens.
2 WO200177384-A2.
3 18-OCT-2001.
4
5 06-APR-2001; 2001WO-IB000713.
6
7 07-APR-2000; 2000DE-01019173.
8 (EPIG-) EPIGENOMICS AG.
9
10 Olek A, Piepenbrock C, Berlin K;
11 WPI; 2001-657177/75.
12
13 Set of oligonucleotides, useful for diagnosis and cell typing, is
14 designed to detect single-nucleotide polymorphisms and cytosine
15 methylation status.
16
17 Claim 1; SEQ ID NO 250125; 29pp + Sequence Listing; German.
18
19 This invention describes novel oligonucleotide primers or peptide nucleic
20 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
21 and cytosine methylation status in chemically pretreated genomic DNA. The
22 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
23 range of diseases including immune system, gastrointestinal, respiratory,
24 central nervous system, cardiovascular and metabolic disorders. The
25 oligomers are also used for detecting cell type differentiation. ABC00010
26 -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABT00010-ABT9989
27 represent the oligomers described in the invention. NOTE: The sequence
28 data for this patent did not form part of the printed specification, but
29 was obtained in electronic format from WIPO at
30 ftp.wipo.int/pub/published_pct_sequences
31
32 Sequence 13 BP; 4 A; 0 C; 2 G; 7 T; 0 U; 0 Other;
33
34 Query Match 14.2%; Score 10.4; DB 1; Length 13;
35 Best Local Similarity 91.7%; Pred. No. 9e+02;
36 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
37
38 Y 941 TCATTGGTTTAA 952
39 b 1 TTATTGGTTTAA 12
40
41 RESULT 560
42 AQ35696
43 D AAQ35696 standard; DNA; 15 BP.
44 X
45 C AAQ35696;
46 X
47 T 25-MAR-2003 (revised)
48 T 24-FEB-1993 (first entry)
49 X
50 X Cloning site production oligo IBRL3.
51 X
52 W NVVAC; recombinant; bovine herpesvirus; type 1; BHV1; vaccinia virus;
53 W Copenhagen vaccine; virulence factors; deletion loci; recipient loci;
54 W giv; flanking arms; Pi promoter; GI; H6 promoter; gIII; I3L promoter;
55 W monoclonal antibodies; Vero cells; ss.
56 X
57 S Synthetic.
58 X
59 X WO9215672-A1.
60 X
61 D 17-SEP-1992.
62 X
63 F 09-MAR-1992; 92WO-US001906.
64 X
65 X 07-MAR-1991; 91US-00666056.
66 R 11-JUN-1991; 91US-00713967.
67 R
68
69 06-MAR-1992; 92US-00847951.
70 (VIRO-) VIROGENETICS CORP.
71
72 Paoletti E, Perkus ME, Taylor J, Tartaglia J, Norton EK;
73 Riviere M, De Taisne C, Limbach KJ, Johnson GP, Pincus SE, Cox WI;
74 Francis J, Gettig RR;
75 WPI; 1992-331718/40.
76
77 Vaccine comprises recombinant, attenuated pox-virus - use for vaccinating
78 against viral infections such as rabies, hepatitis B, HIV, HSV, EBV, CMV,
79 mumps etc.
80
81 Disclosure; Page 194; 456pp; English.
82
83 The sequences given in AAQ35691-703 were used in the construction of
84 NVVAC recombinants expressing the bovine herpesvirus type 1 BHV1 genes.
85 NVVAC is a Copenhagen vaccine strain of vaccinia virus which has been
86 modified by deletion of six non-essential regions of the genome encoding
87 known or potential virulence factors. The deletion loci were engineered
88 as recipient loci for the insertion of foreign genes. The BHV1 gIV was
89 cloned into the vaccinia virus flanking arms and the Pi promoter was
90 cloned upstream of the gIV gene. The gI gene was cloned and placed in
91 operative conjunction with the H6 promoter. The NVVAC transformant
92 containing the gIV and gI genes were used to produce gIV and gI-specific
93 monoclonal antibodies, as the proteins are expressed on the cell surface.
94 The gIII gene was inserted into NVVAC in a separate experiment and placed
95 under the control of the I3L promoter. gIII-specific antibodies were also
96 produced after expression of the gene in transformed Vero cells. Further
97 NVVAC recombinants could be produced containing the BHV1 gIII and gI
98 genes, and the triple recombinant containing the gI, gIII and gIV genes.
99 See also AAQ35501-864. (Updated on 25-MAR-2003 to correct PN field.)
100
101 XQ Sequence 15 BP; 4 A; 3 C; 3 G; 5 T; 0 U; 0 Other;
102
103 Query Match 14.2%; Score 10.4; DB 1; Length 15;
104 Best Local Similarity 91.7%; Pred. No. 9.8e+02;
105 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
106
107 QY 945 TGGTTTAAATGTA 956
108 Db 4 TGGTTTAAATGCA 15
109
110 RESULT 561
111 AAQ54837/C
112 ID AAQ54837 standard; DNA; 15 BP.
113 X
114 AC AAQ54837;
115 X
116 X 25-MAR-2003 (revised)
117 DT 19-JUL-1994 (first entry)
118 X
119 X Sequence of oligo corresp. to WZ7.
120 DE WZ7; oligo; hybrid arrest assay; ss.
121 X
122 X Synthetic.
123 OS
124 X WO9400590-A1.
125 PN
126 X 06-JAN-1994.
127 PD
128 X 22-JUN-1993; 93WO-US005965.
129 PF
130 X 23-JUN-1992; 92US-00904072.
131 PR
132 X 21-JUN-1993; 93US-00080386.
133 PR
134 X (UYNY ) UNIV NEW YORK MT SINAI SCHOOL MEDICINE.
135 PA
136 X Sealton SC;
137 FI
138 X
139 X

```

DR WPI; 1994-026225/03.
 XX Gonadotropin-releasing hormone receptor genes and proteins - for
 PT expression of GnRH and screening and identifying GnRH (ant)agonists, for
 PT diagnosis and therapy of reproductive disorders and for contraception.
 XX Example; Page 29; 73pp; English.
 XX The example describes the cloning of a cDNA representing the mouse
 CC gonadotropin-releasing hormone receptor (GnRH-R) and confirming its
 CC identity using Xenopus oocyte expression. Subclones for hybrid arrest
 CC screening were isolated using PCR with a variety of degenerate oligos
 CC corresp. to conserved transmembrane domains of the GPR superfamily. The
 CC oligos used to isolate the gp. of subclones including WZ7, modified from
 CC sequences of published oligos, corresp. to transmembrane III (AAQ54834)
 CC and transmembrane VI (AAQ54835). PCR was performed, and a portion
 CC restriction digested, subcloned and sequenced. For hybrid-arrest assay,
 CC an antisense oligo corresp. to transmembrane II of the 5HT10 receptor,
 CC and an oligo corresp. to WZ7 were synthesised. (Updated on 25-MAR-2003 to
 CC correct PN field.)
 XX
 SQ Sequence 15 BP; 5 A; 1 C; 7 G; 2 T; 0 U; 0 Other;
 Query Match 14.2%; Score 10.4; DB 1; Length 15;
 Best Local Similarity 91.7%; Pred. No. 9.8e+02;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 933 CCTCCTCTTCAT 944
 DB ||||| |||||
 15 CCTCCTCATCAT 4
 RESULT 562
 AAT54622
 ID AAT54622 standard; RNA; 15 BP.
 XX
 AC AAT54622;
 XX
 DT 25-MAR-2003 (revised)
 DT 22-APR-1997 (first entry)
 XX
 DE Mouse IL-5 hammerhead ribozyme target sequence (nt. position 839).
 XX
 KW Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
 KW gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
 KW intercellular adhesion molecule; rel A; tumour necrosis factor;
 KW TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
 KW translocation; chronic myelogenous leukaemia; CML; cancer;
 KW Philadelphia chromosome; inflammation; autoimmune disease;
 KW atherosclerosis; myocardial infarction; stroke; restenosis;
 KW transplant rejection; rheumatoid arthritis; psoriasis;
 KW myocardial ischaemia; Kawasaki disease; septic shock; HIV;
 KW human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
 KW ss.
 XX
 CS Mus musculus.
 XX
 PN W09523225-A2.
 XX
 PD 31-AUG-1995.
 XX
 PF 23-FEB-1995; 95WO-IB000156.
 XX
 FR 23-FEB-1994; 94US-00201109.
 FR 29-MAR-1994; 94US-00218934.
 FR 04-APR-1994; 94US-00222795.
 FR 07-APR-1994; 94US-00224483.
 FR 15-APR-1994; 94US-00227958.
 FR 15-APR-1994; 94US-00228041.
 FR 18-MAY-1994; 94US-00245736.
 FR 06-JUL-1994; 94US-00271280.
 FR 15-AUG-1994; 94US-00291932.
 FR 16-AUG-1994; 94US-00291433.

PR 17-AUG-1994; 94US-00292620.
 PR 19-AUG-1994; 94US-00293520.
 PR 02-SEP-1994; 94US-00300000.
 PR 08-SEP-1994; 94US-00303039.
 PR 23-SEP-1994; 94US-00311486.
 PR 23-SEP-1994; 94US-00311749.
 PR 28-SEP-1994; 94US-00314397.
 PR 03-OCT-1994; 94US-00316771.
 PR 07-OCT-1994; 94US-00319492.
 PR 11-OCT-1994; 94US-00321993.
 PR 04-NOV-1994; 94US-00334847.
 PR 10-NOV-1994; 94US-00337608.
 PR 28-NOV-1994; 94US-00345516.
 PR 16-DEC-1994; 94US-00357577.
 PR 23-DEC-1994; 94US-00363233.
 PR 30-JAN-1995; 95US-00380734.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 XX
 PI Stinchcomb DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW;
 PI Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
 PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
 PI Tracz D, Usman N, Wincott FE, Woolf T;
 XX WPI; 1995-351090/45.
 DR
 XX Ribozymes having modified bases and methods for producing them - for use
 PT in inhibiting disease related genes.
 PT
 PS
 XX Claim 2; Page 221; 407pp; English.
 XX
 CC The present sequence represents a preferred target sequence for an
 CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves interleukin-5 (IL-
 CC 5) mRNA at the nucleotide base position indicated in the DE line. Regions
 CC of the mRNA that do not form secondary folding structures and that
 CC contain potential hammerhead and hairpin ribozyme cleavage sites were
 CC identified by computer analysis. Ribozymes directed against these mRNA
 CC sequences were designed and synthesised with modifications that improve
 CC their nuclease resistance. The ribozymes cleave the IL-5 target sequences
 CC and thereby inhibit IL-5 expression, making them useful for treating
 CC chronic asthma, e.g. by inhibiting the synthesis of IL-5 in lymphocytes
 CC and preventing the recruitment and activation of eosinophils. The
 CC ribozymes can also be used to treat eosinophilia (related to parasitic
 CC infection or with pulmonary infiltration) and L-tryptophan-associated
 CC eosinophilia-myalgia syndrome. (Updated on 25-MAR-2003 to correct PI
 CC field.)
 XX
 SQ Sequence 15 BP; 2 A; 5 C; 2 G; 0 T; 6 U; 0 Other;
 Query Match 14.2%; Score 10.4; DB 1; Length 15;
 Best Local Similarity 41.7%; Pred. No. 9.8e+02;
 Matches 5; Conservative 6; Mismatches 1; Indels 0; Gaps 0;
 QY 935 TCCTCTTCATG 946
 DB :||:|:|:|:|
 2 UCCUCUUGUUG 13
 RESULT 563
 AAT54624
 ID AAT54624 standard; RNA; 15 BP.
 XX
 AC AAT54624;
 XX
 DT 25-MAR-2003 (revised)
 DT 22-APR-1997 (first entry)
 XX
 DE Mouse IL-5 hammerhead ribozyme target sequence (nt. position 840).
 XX
 KW Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
 KW gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
 KW intercellular adhesion molecule; rel A; tumour necrosis factor;
 KW TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;

translocation; chronic myelogenous leukaemia; CML; cancer;
Philadelphia chromosome; inflammation; autoimmune disease;
atherosclerosis; myocardial infarction; stroke; retinosis;
transplant rejection; rheumatoid arthritis; psoriasis;
myocardial ischaemia; Kawasaki disease; septic shock; HIV;
human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
ss.
Mus musculus.
WO9523225-A2.
31-AUG-1995.
23-FEB-1995; 95WO-IB000156.
23-FEB-1994; 94US-00201109.
29-MAR-1994; 94US-00218934.
04-APR-1994; 94US-00222795.
07-APR-1994; 94US-00224483.
15-APR-1994; 94US-00227958.
15-APR-1994; 94US-00228041.
18-MAY-1994; 94US-00245736.
06-JUL-1994; 94US-00271280.
15-AUG-1994; 94US-00291932.
16-AUG-1994; 94US-00291433.
17-AUG-1994; 94US-00292620.
19-AUG-1994; 94US-00293520.
02-SEP-1994; 94US-00300000.
08-SEP-1994; 94US-00303039.
23-SEP-1994; 94US-00311486.
23-SEP-1994; 94US-00311749.
28-SEP-1994; 94US-00314397.
03-OCT-1994; 94US-00316771.
07-OCT-1994; 94US-00319492.
11-OCT-1994; 94US-00321993.
04-NOV-1994; 94US-00334847.
10-NOV-1994; 94US-00337608.
28-NOV-1994; 94US-00345516.
16-DEC-1994; 94US-00357577.
23-DEC-1994; 94US-00363233.
30-JAN-1995; 95US-00380734.
(RIBO-) RIBOZYME PHARM INC.
A Schinchcomb DT, Chowira B, Direnzo A, Draper KG, Dudycz LW;
Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
Tracz D, Usman N, Wincott FE, Woolf T;
WPI; 1995-351090/45.
R Ribozymes having modified bases and methods for producing them - for use
in inhibiting disease related genes.
S Claim 2; Page 221; 407pp; English.
X The present sequence represents a preferred target sequence for an
C enzymatic nucleic acid (i.e. a ribozyme) which cleaves interleukin-5 (IL-
C 5) mRNA at the nucleotide base position indicated in the DE line. Regions
C of the mRNA that do not form secondary folding structures and that
C contain potential hammerhead and hairpin ribozyme cleavage sites were
C identified by computer analysis. Ribozymes directed against these mRNA
C sequences were designed and synthesised with modifications that improve
C their nuclease resistance. The ribozymes cleave the IL-5 target sequences
C and thereby inhibit IL-5 expression, making them useful for treating
C chronic asthma, e.g. by inhibiting the synthesis of IL-5 in lymphocytes
C and preventing the recruitment and activation of eosinophils. The
C ribozymes can also be used to treat eosinophilia (related to parasitic
C infection or with pulmonary infiltration) and L-tryptophan-associated
C eosinophilia-myalgia syndrome. (Updated on 25-MAR-2003 to correct PI
C field.)
X

SQ Sequence 15 BP; 1 A; 5 C; 2 G; 0 T; 7 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 15;
Best Local Similarity 41.7%; Pred. No. 9.8e+02;
Matches 5; Conservative 6; Mismatches 1; Indels 0; Gaps 0;
QY 935 TCCTCTTCATTG 946
:|:|:|:|:|:|:
Db 1 UCCUCUUGGUUG 12
RESULT 564
AAT33389
ID AAT33389 standard; cDNA; 15 BP.
XX
AC AAT33389;
XX
DT 16-MAY-1997 (first entry)
XX
DE Human vascular endothelial growth factor antisense oligonucleotide.
XX
KW Antisense; VEGF; vascular endothelial growth factor; hypoxia;
KW neovascularisation; angiogenesis; metastasis; retinopathy; macular;
KW degeneration; expression inhibitor; ss.
XX
OS Synthetic.
XX
PN WO9627006-A2.
XX
PD 06-SEP-1996.
XX
PF 29-FEB-1996; 96WO-US002840.
XX
PR 02-MAR-1995; 95US-00398945.
PR 08-DEC-1995; 95US-00569926.
XX
PA (HYBR-) HYBRIDON INC.
XX
PI Robinson GS;
XX
DR WPI; 1996-412773/41.
XX
PT Human vascular endothelial growth factor anti-sense oligonucleotide -
PT inhibits the expression of VEGF, useful in treatment of hypoxia induced
PT neovascularisation and angiogenesis associated disease states.
XX
PS Claim 20; Page 52; 92pp; English.
XX
CC AAT33371-T33431 are antisense oligonucleotides used to inhibit the
CC expression of human vascular endothelial growth factor (VEGF). The
CC synthetic oligonucleotides contain phosphorothioate linkages and
CC essentially consist of 2'-O-alkylated ribonucleotides. Inhibiting the
CC expression of VEGF is useful in the treatment of hypoxia induced
CC neovascularisation and angiogenesis associated disease states.
CC retinopathy of prematurity, diabetic retinopathy and age related macular
CC degeneration
XX
SQ Sequence 15 BP; 0 A; 7 C; 1 G; 7 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 15;
Best Local Similarity 91.7%; Pred. No. 9.8e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 934 CTCCTCTTCATT 945
|:|:|:|:|:|:|:
Db 3 CTCCTCTTCCTT 14
RESULT 565
AAT48404
ID AAT48404 standard; DNA; 15 BP.
XX
AC AAT48404;

XX DT 11-MAR-1997 (first entry)
 XX XX
 DE Oligonucleotide H-9A specific for human VEGF nucleic acid.
 XX XX
 KW Vascular endothelial growth factor; inhibition; decrease; antisense;
 KW neovascularisation; retinopathy; age-related macular degeneration;
 KW diabetes; ss.
 XX OS Synthetic.
 XX XX
 EN WO9623065-A2.
 XX XX
 PD 01-AUG-1996.
 XX XX
 PF 26-JAN-1996; 96WO-US001189.
 XX XX
 PR 26-JAN-1995; 95US-00378860.
 XX XX
 PA (HYBR-) HYBRIDON INC.
 PA (CHIL-) CHILDRENS MEDICAL CENT.
 XX XX
 PI Robinson GS, Smith LEH;
 XX XX
 DR WPI; 1996-362689/36.
 XX XX
 PT Inhibiting neovascularisation using VEGF-specific oligo:nucleotide(s) -
 PT for treatment of retinopathies and age-related macular degeneration.
 XX XX
 PS Disclosure; Page 12; 66pp; English.
 XX XX
 CC Neovascularisation can be reduced by blocking vascular endothelial growth
 CC factor (VEGF) expression using a synthetic oligonucleotide specific for
 CC VEGF. Inhibiting neovascularisation is useful for treatment of
 CC retinopathy of prematurity, diabetic retinopathy and age-related macular
 CC degeneration. The present sequence is an example of a suitable
 CC oligonucleotide specific for human VEGF
 XX XX
 SQ Sequence 15 BP; 0 A; 7 C; 1 G; 7 T; 0 U; 0 Other;
 Query Match 14.2%; Score 10.4; DB 1; Length 15;
 Best Local Similarity 91.7%; Pred. No. 9.8e+02;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 C Y 934 CTCCTCTTCATT 945
 D b 3 CTCCTCTTCCTT 14
 XX XX
 RESULT 566
 AAT37305/c
 ID AAT37305 standard; DNA; 15 BP.
 XX XX
 AC AAT37305;
 XX XX
 DT 04-DEC-1996 (first entry)
 XX XX
 DE GnRH receptor clone WZ7 antisense oligonucleotide.
 XX XX
 KW Gonadotropin-releasing hormone receptor; GnRH-R; G-protein receptor;
 KW signal transduction; reproduction; contraception; diagnosis; therapy;
 KW polymerase chain reaction; PCR; primer; antisense; ss.
 XX OS Synthetic.
 XX XX
 EN WO9625423-A1.
 XX XX
 PJ 22-AUG-1996.
 XX XX
 PF 26-JAN-1996; 96WO-US001034.
 XX XX
 PR 17-FEB-1995; 95US-00390000.
 XX XX

PA (MOUN) MOUNT SINAI SCHOOL MEDICINE.
 XX XX
 PI Sealfon SC;
 XX XX
 DR WPI; 1996-393334/39.
 XX XX
 PT Identifying modulators of gonadotropin-releasing hormone receptor -
 PT including new anti-sense oligo:nucleotide(s) and antibodies, useful e.g.
 PT for contraception or diagnosis and treatment of reproductive disorders.
 XX XX
 PS Example 6; Page 43; 76pp; English.
 XX XX
 CC An antisense oligonucleotide (AAT37305) is based on clone WZ7 (see also
 CC AAT37302-03), derived from mouse gonadotrope alpha-T3-1 cells. In a
 CC hybrid-arrest assay, the WZ7 antisense oligo was co-injected with alpha-
 CC T3-1 and rat brain RNA into Xenopus oocytes. It completely abolished
 CC expression of the gonadotropin-releasing hormone receptor (GnRH-R) in
 CC the oocytes but did not affect expression of the brain 5HT1C receptor.
 CC WZ7 was used as a probe to isolate a cDNA clone (AAT37306) coding for
 CC murine GnRH-R (AAW03995)
 XX XX
 SQ Sequence 15 BP; 5 A; 1 C; 7 G; 2 T; 0 U; 0 Other;
 Query Match 14.2%; Score 10.4; DB 1; Length 15;
 Best Local Similarity 91.7%; Pred. No. 9.8e+02;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 Q Y 933 CCTCCTCTTCAT 944
 D b 15 CCTCCTCATCAT 4
 XX XX
 RESULT 567
 AAX75708
 ID AAX75708 standard; RNA; 15 BP.
 XX XX
 AC AAX75708;
 XX XX
 DT 28-JUL-1999 (first entry)
 XX XX
 DE Human flt-1 and KDR hammerhead ribozyme target site #42.
 XX XX
 KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
 KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
 KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
 KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
 KW foetal liver kinase 1; ss.
 XX OS Homo sapiens.
 XX XX
 EN WO9715662-A2.
 XX XX
 PD 01-MAY-1997.
 XX XX
 PF 25-OCT-1996; 96WO-US017480.
 XX XX
 PR 26-OCT-1995; 95US-0005974P.
 PR 11-JAN-1996; 96US-00584040.
 XX XX
 PA (RIBO-) RIBOZYME PHARM INC.
 PA (CHIR) CHIRON CORP.
 XX XX
 PI Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
 XX XX
 DR WPI; 1997-259017/23.
 XX XX
 PT Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
 PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,
 PT rheumatoid arthritis, etc., in a human patient.
 XX XX
 PS Example 9; Page 192; 218pp; English.
 XX XX
 CC The present invention describes nucleic acid molecules which modulate the

synthesis, expression and/or stability of a mRNA encoding 1 or more receptors of vascular endothelial growth factor (VEGF). A patient (preferably human) having a condition associated with the level of the fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be treated by administering the nucleic acid molecule or the expression vector to the patient. AAX67275 to AAX75752 represent specific examples of nucleic acid molecules from the present invention

Sequence 15 BP; 2 A; 5 C; 1 G; 0 T; 7 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 15;

Best Local Similarity 41.7%; Pred. No. 9.8e+02; Mismatches 5; Conservative 6; Indels 0; Gaps 0;

922 TGCCCTTTATCC 933

3 UUUUUUUUAUCC 14

RESULT 568

AAT76412 standard; DNA; 15 BP.

AAT76412;

15-SEP-1997 (first entry)

Human endothelin-1 antisense oligonucleotide.

Asthma; airway epithelium; adenosine free; cystic fibrosis; chronic obstructive pulmonary disease; bronchitis; ss.

Synthetic.

WO9640162-A1.

19-DEC-1996.

06-JUN-1996; 96WO-US009306.

07-JUN-1995; 95US-00474497.

(UYEC-) UNIV EAST CAROLINA.

Nyce JW, Metzger WJ;

WPI; 1997-051871/05.

Treatment of airway diseases such as asthma - by topically applying adenosine-free antisense oligonucleotide to airway epithelium of subject.

Claim 5; Page 38; 71pp; English.

A method for treating airway disease in a subject has been produced, which involves the topical administration of an essentially adenosine free antisense oligonucleotide (ON) to the airway epithelium of the subject. The present sequence is an antisense oligonucleotide specific for the human endothelin-1. The method can be used to treat airway diseases such as cystic fibrosis, asthma, chronic obstructive pulmonary disease, bronchitis and other airway diseases characterised by an inflammatory response. By eliminating adenosine from the antisense ON, its liberation upon antisense degradation is prevented, thereby preventing adenosine-induced bronchoconstriction in patients with hyper-reactive airways

Sequence 15 BP; 0 A; 4 C; 1 G; 10 T; 0 U; 0 Other;

Query Match

Best Local Similarity 91.7%; Pred. No. 9.8e+02;

Mismatches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 917 GTCCTTGCCCTT 928

|||||

1 GTCCTTGCCCTT 12

RESULT 569

AAX54195 standard; DNA; 15 BP.

AAX54195;

05-JUL-1999 (first entry)

Human endothelin-1 antisense oligonucleotide fragment.

Antisense oligonucleotide; multiple target; antisense treatment;

impaired respiration; inflammation; lung disease;

pulmonary vasoconstriction; inflammation; allergic rhinitis;

acute asthma; allergy; asthma; impeded respiration;

respiratory distress syndrome; pain; cystic fibrosis;

pulmonary hypertension; pulmonary vasoconstriction; emphysema;

chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;

colon cancer; breast cancer; lung cancer; pancreatic cancer;

hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;

prostate cancer; ss.

Synthetic.

WO9913886-A1.

25-MAR-1999.

17-SEP-1998; 98WO-US019419.

17-SEP-1997; 97US-0059160P.

09-JUN-1998; 98US-00093972.

(UYEC-) UNIV EAST CAROLINA.

Nyce JW;

WPI; 1999-229400/19.

New antisense oligonucleotides used in treatment of, e.g. pulmonary

vasoconstriction.

Disclosure; Page 57; 120pp; English.

The specification describes antisense oligonucleotides (AAX52869-X55271) directed against at least 2 mRNAs selected from target genes, coding and non-coding regions of RNAs corresponding to target genes, gene initiation codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-end and the junction between coding and non-coding regions and all segments of RNAs encoding proteins associated with one or more diseases, conditions or mixtures. The antisense oligonucleotides may be derived from sequences AAX5272-74. These multiple target oligonucleotides (specifically AAX55180-271) can be used for the antisense treatment of diseases and conditions. Typical diseases and conditions are those associated with impaired respiration and inflammation, including lung diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis, acute asthma, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, pulmonary hypertension, pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g. colon cancer, breast cancer, lung cancer, pancreatic cancer, hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as well as all types of cancers which may metastasize or have metastasized to the lungs, including breast and prostate cancer

Sequence 15 BP; 0 A; 4 C; 1 G; 10 T; 0 U; 0 Other;

Query Match

14.2%; Score 10.4; DB 1; Length 15;

Best Local Similarity 91.7%; Pred. No. 9.8e+02; Mismatches 0; Indels 1; Gaps 0;

Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 917 GCTTTGCCCTTT 928
||||| |||||
Db 1 GCTTTGCCCTTT 12

RESULT 570
AA54205
ID AA54205 standard; DNA; 15 BP.
AC AA54205;
JT 05-JUL-1999 (first entry)
XX Human endothelin-1 antisense oligonucleotide fragment.
DE
XX Antisense oligonucleotide; multiple target; antisense treatment;
KW impaired respiration; inflammation; lung disease;
KW pulmonary vasoconstriction; inflammation; allergic rhinitis;
KW acute asthma; allergy; asthma; impeded respiration;
KW respiratory distress syndrome; pain; cystic fibrosis;
KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;
KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
KW colon cancer; breast cancer; lung cancer; pancreatic cancer;
KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
KW prostate cancer; ss.
OS Synthetic.
XX
XX WO9913886-A1.
PN
XX
XX 25-MAR-1999.
PD
XX
XX 17-SEP-1998; 98WO-US019419.
PF
XX
XX 17-SEP-1997; 97US-0059160P.
PR
XX 09-JUN-1998; 98US-00093972.
PR
XX (UYEC-) UNIV EAST CAROLINA.
PA
XX
XX
XX Nyce JW;
PI
XX
XX WPI; 1999-229400/19.
DR
XX
XX New antisense oligonucleotides used in treatment of, e.g. pulmonary
PT vasoconstriction.
PT
XX
XX Disclosure; Page 58; 120pp; English.
PS
XX The specification describes antisense oligonucleotides (AA52869-X55271)
CC directed against at least 2 mRNAs selected from target genes, coding and
CC non-coding regions of RNAs corresponding to target genes, gene initiation
CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-
CC end and the juxta-section between coding and non-coding regions and all
CC segments of RNAs encoding proteins associated with one or more diseases,
CC conditions or mixtures. The antisense oligonucleotides may be derived
CC from sequences AA55272-74. These multiple target oligonucleotides
CC (specifically AA55180-271) can be used for the antisense treatment of
CC diseases and conditions. Typical diseases and conditions are those
CC associated with impaired respiration and inflammation, including lung
CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
CC acute asthma, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
CC colon cancer, breast cancer, lung cancer, pancreatic cancer,
CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
CC well as all types of cancers which may metastasize or have metastasized
CC to the lungs, including breast and prostate cancer
XX
XX Sequence 15 BP; 0 A; 4 C; 1 G; 10 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 15;
Best Local Similarity 91.7%; Pred. No. 9.8e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 917 GCTTTGCCCTTT 928
||||| |||||
Db 1 GCTTTGCCCTTT 12

RESULT 571
AAA33639
ID AAA33639 standard; DNA; 15 BP.
XX
XX AAA33639;
AC
XX
XX 28-JUL-2000 (first entry)
DT
XX Low adenosine antisense oligonucleotide SEQ ID NO:1328.
DE
XX Human; adenosine receptor; low adenosine antisense oligonucleotide;
KW phosphorothioate; impaired respiration; inflammation; allergy;
KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
KW antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;
KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;
KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
XX
XX Homo sapiens.
OS
XX
XX WO200009525-A2.
PN
XX
XX 24-FEB-2000.
PD
XX
XX 03-AUG-1999; 99WO-US017712.
PF
XX
XX 03-AUG-1998; 98US-0095212P.
PR
XX (UYEC-) UNIV EAST CAROLINA.
PA
XX
XX Nyce JW;
PI
XX
XX WPI; 2000-205971/18.
DR
XX
XX New antisense oligonucleotides useful for treating e.g. pulmonary
PT vasoconstriction, inflammation, allergies, asthma, hypertension,
PT bronchitis, emphysema, respiratory distress syndrome, ischemia or
PT cancers.
PT
XX
XX Claim 18; Page 430; 1343pp; English.
PS
XX The present invention describes a new composition comprising an antisense
CC oligonucleotide (ON) with low adenosine (up to 15%), which targets
CC nucleic acids involved in bronchoconstriction, allergies, and/or
CC inflammation. The ON can have antiinflammatory, antiallergic,
CC antiasthmatic, cytostatic and analgesic activities. The compositions are
CC useful for the treatment of diseases associated with inflammation,
CC impaired airways, including lung disease and diseases whose secondary
CC effects afflict the lungs of a subject. They can be used for treating
CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
CC impeded respiration, respiratory distress syndrome, pain, cystic
CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive
CC pulmonary disease (COPD), and cancers such as leukemias, lymphomas,
CC carcinomas, and cancers which may metastasize to the lungs, including
CC breast and prostate cancer. The reduction of the adenosine content of the
CC ONs reduces side effects. The A-containing ONs break down with the
CC release of deoxyadenosine which activates adenosine receptors causing
CC bronchoconstriction and inflammation. AAA32313 to AAA35312 represent
CC nucleotide sequences given in the sequence listing from the present
CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ
CC from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to

AAA33992) are specifically claimed ONs from the present invention. N.B. Sequences given in the disclosure of the present invention do not match up with their corresponding SEQ ID NO: sequences given in the sequence listing

Sequence 15 BP; 0 A; 4 C; 1 G; 10 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 15;
Best Local Similarity 91.7%; Pred. No. 9.8e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

917 GTCCTTGCCCTT 928
|||||
1 GTCCTTGCCCTT 12

RESULT 572
AAA33649
AAA33649 standard; DNA; 15 BP.

AAA33649;
28-JUL-2000 (first entry)

Low adenosine antisense oligonucleotide SEQ ID NO:1338.

Human; adenosine receptor; low adenosine antisense oligonucleotide; phosphorothioate; impaired respiration; inflammation; allergy; allergic disease; bronchoconstriction; inhibitor; antiinflammatory; antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway; lung disease; ischaemic condition; pulmonary vasoconstriction; asthma; respiratory distress syndrome; pain; cystic fibrosis; emphysema; pulmonary hypertension; chronic obstructive pulmonary disease; COPD; cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.

Homo sapiens.
WO200009525-A2.
24-FEB-2000.

03-AUG-1999; 99WO-US017712.
03-AUG-1998; 98US-0095212P.
(UYEC-) UNIV EAST CAROLINA.
Nyce JW;
WPI; 2000-205971/18.

New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstriction, inflammation, allergies, asthma, hypertension, bronchitis, emphysema, respiratory distress syndrome, ischemia or cancers.

Claim 18; Page 432; 1343pp; English.

The present invention describes a new composition comprising an antisense oligonucleotide (ON) with low adenosine (up to 15%), which targets nucleic acids involved in bronchoconstriction, allergies, and/or inflammation. The ON can have antiinflammatory, antiallergic, antiasthmatic, cytostatic and analgesic activities. The compositions are useful for the treatment of diseases associated with inflammation, impaired airways, including lung disease and diseases whose secondary effects afflict the lungs of a subject. They can be used for treating e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease (COPD), and cancers such as leukaemias, lymphomas, carcinomas, and cancers which may metastasise to the lungs, including breast and prostate cancer. The reduction of the adenosine content of ONs reduces side effects. The A-containing ONs break down with the

release of deoxyadenosine which activates adenosine receptors causing bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the nucleotide sequences given in the sequence listing from the present invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185 sequences are also called SEQ ID NO:1 to 185, but the sequences differ from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to AAA33992) are specifically claimed ONs from the present invention. N.B. Sequences given in the disclosure of the present invention do not match up with their corresponding SEQ ID NO: sequences given in the sequence listing

Sequence 15 BP; 0 A; 4 C; 1 G; 10 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 15;
Best Local Similarity 91.7%; Pred. No. 9.8e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

917 GTCCTTGCCCTT 928
|||||
1 GTCCTTGCCCTT 12

RESULT 573
AAZ64176
AAZ64176 standard; RNA; 15 BP.

AAZ64176;
28-MAR-2000 (first entry)

Substrate for hammerhead ribozyme which cleaves HCV RNA at nt. 5762.

Enzymatic nucleic acid; hammerhead ribozyme; virus replication; cleavage; cirrhosis; liver failure; hepatocellular carcinoma; interferon; cancer; autoimmune disease; ss.

Hepatitis C virus.
WO9555847-A2.
04-NOV-1999.

26-APR-1999; 99WO-US009027.
27-APR-1998; 98US-0083217P.
18-SEP-1998; 98US-0100842P.
25-FEB-1999; 99US-00257608.
23-MAR-1999; 99US-00274553.

(RIBO-) RIBOZYME PHARM INC.

Blatt L, McSwiggen JA, Roberts E, Pavco PA, Macejak D;
WPI; 2000-062023/05.

Novel ribozymes for the treatment of diseases and conditions related to hepatitis C infection.

Claim 1; Page 83; 123pp; English.

The present sequence represents the preferred target sequence of an enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves the Hepatitis C virus (HCV) RNA sequence at the base position given in the descriptor line. The HCV sequence was screened for optimal ribozyme target sites using a computer folding algorithm and regions of the mRNA which did not form secondary folding structures and contained potential ribozyme cleavage sites were identified. Ribozymes were synthesised to target these sites and their activities optimised by either varying the length of the binding arms or by modification to prevent degradation by nucleases. The ribozymes of the invention inhibit gene expression and/or viral replication, and are used to treat diseases associated with Hepatitis C virus (HCV) infection, e.g. cirrhosis, liver failure and hepatocellular carcinoma. The ribozymes may be used in combination with

CC interferon to treat HCV infection, other infectious diseases, autoimmune
 CC diseases, and cancer

XX
 SQ Sequence 15 BP; 3 A; 6 C; 1 G; 0 T; 5 U; 0 Other;
 Query Match 14.2%; Score 10.4; DB 1; Length 15;
 Best Local Similarity 58.3%; Pred. No. 9.8e+02;
 Matches 7; Conservative 4; Mismatches 1; Indels 0; Gaps 0;

QY 932 CCTCTCTCTCA 943
 |||:|:|:|:|
 Db 4 CCCUCGUUCA 15

RESULT 574

AAFI9761
 ID AAFI9761 standard; DNA; 15 BP.

XX
 AC AAFI9761;

XX
 DT 14-MAR-2001 (first entry)

XX
 DE Human endothelin-1 polynucleotide fragment #1328.

XX
 KW Low adenine antisense oligonucleotide; phosphorothioate; allergy;
 human; airway disorder; bronchoconstriction; lung inflammation;
 surfactant depletion; respiratory; bronchodilator; antiinflammatory;
 immunosuppressive; antiasthmatic; analgesic; hypotensive; cytosolic;
 respiratory obstruction; pulmonary vasoconstriction; impeded respiration;
 surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
 respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
 pulmonary hypertension; emphysema; pulmonary transplantation rejection;
 chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
 cancer; ss.

XX
 OS Homo sapiens.

XX
 FN WO200062736-A2.

XX
 FD 26-OCT-2000.

XX
 FF 24-MAR-2000; 2000WO-US008020.

XX
 FR 06-APR-1999; 99US-0127958P.

XX
 FA (UYEC-) UNIV EAST CAROLINA.

XX
 PA (NYCE/) NYCE J W.

XX
 PI Nyce JW;

XX
 DR WPI; 2000-679539/66.

XX
 DR Low adenine (A) content antisense oligonucleotides which do not trigger
 FT adenine receptors during metabolism, useful e.g. for treating cancers
 FT and respiratory obstructions.

XX
 PS Claim 14; Page 241; 1592pp; English.

XX
 CC The present invention describes low adenine (A) content antisense
 CC oligonucleotides and compositions (I) comprising them. In the antisense
 CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
 CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
 CC immunosuppressive, antiasthmatic, hypotensive and cytosolic activities.
 CC The antisense oligonucleotides and (I) can be used to down-regulate the
 CC expression and or activity of target polypeptides associated with
 CC lung/respiratory disorders and malignancies, such as stimulating and
 CC activating peptide factors and transmitters, transcription factors,
 CC immunoglobulins and antibodies, antibody receptors, cytokines and
 CC chemokines, endogenously produced specific and non-specific enzymes,
 CC binding proteins, adhesion molecules and their receptors, cytokine and
 CC chemokine receptors, adenine receptors, bradykinin receptors, central
 CC nervous system (CNS) and peripheral nervous and non-nervous system
 CC receptors, CNS and peripheral nervous and non-nervous system peptide

CC transmitters, defensins, growth factors, vasoactive peptides and
 CC receptors, binding proteins and malignancy associated proteins. The
 CC antisense oligonucleotides may be used in this way to treat disorders
 CC including respiratory obstruction (especially pulmonary obstruction
 CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
 CC surfactant hypoproduction which are associated with a disease or
 CC condition selected from pulmonary vasoconstriction, inflammation,
 CC allergies, asthma, impeded respiration, respiratory distress syndrome
 CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
 CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
 CC and/or cancer. AAFI9434 to AAFI9453 represent human polynucleotide
 CC fragments and antisense oligonucleotides used in the exemplification of
 CC the present invention

SQ Sequence 15 BP; 0 A; 4 C; 1 G; 10 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 15;

Best Local Similarity 91.7%; Pred. No. 9.8e+02;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 917 GTCTTTCCTTT 928

||||| |||||

Db 1 GTCTTTCCTTT 12

RESULT 575

AAFI9771

ID AAFI9771 standard; DNA; 15 BP.

XX
 AC AAFI9771;

XX
 DT 14-MAR-2001 (first entry)

XX
 DE Human endothelin-1 polynucleotide fragment #1338.

XX
 KW Low adenine antisense oligonucleotide; phosphorothioate; allergy;
 human; airway disorder; bronchoconstriction; lung inflammation;
 surfactant depletion; respiratory; bronchodilator; antiinflammatory;
 immunosuppressive; antiasthmatic; analgesic; hypotensive; cytosolic;
 respiratory obstruction; pulmonary vasoconstriction; impeded respiration;
 surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
 respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
 pulmonary hypertension; emphysema; pulmonary transplantation rejection;
 chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
 cancer; ss.

XX
 OS Homo sapiens.

XX
 FN WO200062736-A2.

XX
 FD 26-OCT-2000.

XX
 PF 24-MAR-2000; 2000WO-US008020.

XX
 PR 06-APR-1999; 99US-0127958P.

XX
 PA (UYEC-) UNIV EAST CAROLINA.

XX
 PA (NYCE/) NYCE J W.

XX
 PI Nyce JW;

XX
 DR WPI; 2000-679539/66.

XX
 PT Low adenine (A) content antisense oligonucleotides which do not trigger
 FT adenine receptors during metabolism, useful e.g. for treating cancers
 FT and respiratory obstructions.

XX
 PS Claim 14; Page 242; 1592pp; English.

XX
 CC The present invention describes low adenine (A) content antisense
 CC oligonucleotides and compositions (I) comprising them. In the antisense
 CC oligonucleotides the A is replaced by a 'Universal' or alternative base.

(1) can have respiratory, bronchodilator, antiinflammatory, analgesic, immunosuppressive, antisthmatic, hypotensive and cytostatic activities. The antisense oligonucleotides and (1) can be used to down-regulate the expression and/or activity of target polypeptides associated with lung/respiratory disorders and malignancies, such as stimulating and activating peptide factors and transmitters, transcription factors, immunoglobulins and antibodies, antibody receptors, cytokines and chemokines, endogenously produced specific and non-specific enzymes, binding proteins, adhesion molecules and their receptors, cytokine and chemokine receptors, adenosine receptors, bradykinin receptors, central nervous system (CNS) and peripheral nervous and non-nervous system receptors, CNS and peripheral nervous and non-nervous system peptide transmitters, defensins, growth factors, vasoactive peptides and receptors, binding proteins and malignancy associated proteins. The antisense oligonucleotides may be used in this way to treat disorders including respiratory obstruction (especially pulmonary obstruction and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or surfactant hypoproduction which are associated with a disease or condition selected from pulmonary vasoconstriction, inflammation, allergies, asthma, impeded respiration, respiratory distress syndrome (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary hypertension, emphysema, chronic obstructive pulmonary disease (COPD), pulmonary transplantation rejection, pulmonary infections, bronchitis, and/or cancer. AAF18434 to AAF21543 represent human polynucleotide fragments and antisense oligonucleotides used in the exemplification of the present invention

Sequence 15 BP; 0 A; 4 C; 1 G; 10 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 15;
Best Local Similarity 91.7%; Pred. No. 9.8e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

917 GCTTTGCTTTT 928
|||||
1 GCTTTTCTTTT 12

RESULT 576
AAF48460/C
AAF48460 standard; DNA; 15 BP.

AAF48460;

30-MAR-2001 (first entry)

IGFBP3 oligonucleotide #1880.

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;
IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
hyperneovascular condition; hyperplasia; kidney disease;
neovascular condition of the retina; ss.

Homo sapiens.

WO200078341-A1.

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693.

21-JUN-1999; 99US-0140345P.

(MURD-) MURDOCH CHILDRENS RES INST.

Wright CJ, Werther GA, Edmondson SR;

WPI; 2001-041421/05.

PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT inhibits or reduces growth factor mediated cell proliferation and/or
PT inflammation.

XX Example 7; Page 56; 201pp; English.

PS The present invention relates to a method for ameliorating the effects of
XX skin disorders. The method comprises contacting the skin with an
CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC inhibiting or reducing growth factor mediated cell proliferation,
CC inflammation and/or other disorders. The present sequence is an
CC oligonucleotide which can be used to design the antisense
CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC F45161). The method is useful for ameliorating the effects of psoriasis,
CC ichthyosis, ptyriasis, ruba, pilaris, serborrhea, keloids, keratosis,
CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC hyperneovascular condition such as a neovascular condition of the retina,
CC brain or skin, growth factor-mediated malignancies, other sclerotic
CC disease, kidney disease, hyperproliferation of the inside of blood
CC vessels or any other hyperplasia

XX Sequence 15 BP; 6 A; 2 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 15;
Best Local Similarity 91.7%; Pred. No. 9.8e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 919 CTTTGCTTTTA 930

Db 12 CTTTGCTTTAA 1

RESULT 577

AAF49429

ID AAF49429 standard; DNA; 15 BP.

AAF49429;

30-MAR-2001 (first entry)

IGF-I oligonucleotide #389.

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;
IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
hyperneovascular condition; hyperplasia; kidney disease;
neovascular condition of the retina; ss.

Homo sapiens.

WO200078341-A1.

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693.

21-JUN-1999; 99US-0140345P.

(MURD-) MURDOCH CHILDRENS RES INST.

Wright CJ, Werther GA, Edmondson SR;

WPI; 2001-041421/05.

XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT inhibits or reduces growth factor mediated cell proliferation and/or
PT inflammation.

XX Example 8; Page 63; 201pp; English.

PS The present invention relates to a method for ameliorating the effects of

XX skin disorders. The method comprises contacting the skin with an

CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1

CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of

CC inhibiting or reducing growth factor mediated cell proliferation,

CC inflammation and/or other disorders. The present sequence is an

CC oligonucleotide which can be used to design the antisense

CC oligonucleotides of the present invention (see AAF45151 and AAF45153-

CC F45161). The method is useful for ameliorating the effects of psoriasis,

CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,

CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a

CC hyperneovascular condition such as a neovascular condition of the retina,

CC brain or skin, growth factor-mediated malignancies, other sclerotic

CC disease, kidney disease, hyperproliferation of the inside of blood

CC vessels or any other hyperplasia

XX Sequence 15 BP; 2 A; 6 C; 3 G; 4 T; 0 U; 0 Other;

SQ

Query Match 14.2%; Score 10.4; DB 1; Length 15;

Best Local Similarity 91.7%; Pred. No. 9.8e+02;

Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 899 CCTGGTCATTT 910

Tb 4 CCTGGTCATCT 15

|||||

RESULT 578

AAF48457/c

ID AAF48457 standard; DNA; 15 BP.

XX

AC AAF48457;

XX

DT 30-MAR-2001 (first entry)

XX

DE IGFBP3 oligonucleotide #1877.

XX

KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;

KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;

KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;

KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;

KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;

KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;

KW hyperneovascular condition; hyperplasia; kidney disease;

KW neovascular condition of the retina; ss.

XX

OS Homo sapiens.

XX

PN WO200078341-A1.

XX

PD 28-DEC-2000.

XX

PF 21-JUN-2000; 2000WO-AU000693.

XX

PR 21-JUN-1999; 99US-0140345P.

XX

PA (MURD-) MURDOCH CHILDRENS RES INST.

XX

PI Wraight CJ, Werther GA, Edmondson SR;

XX

DR WPI; 2001-041421/05.

XX

PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering

PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that

PT inhibits or reduces growth factor mediated cell proliferation and/or

PT inflammation.

XX

PS Example 7; Page 56; 201pp; English.

XX

CC The present invention relates to a method for ameliorating the effects of

CC skin disorders. The method comprises contacting the skin with an

CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1

CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of

CC inhibiting or reducing growth factor mediated cell proliferation,

CC inflammation and/or other disorders. The present sequence is an

CC oligonucleotide which can be used to design the antisense

CC oligonucleotides of the present invention (see AAF45151 and AAF45153-

CC F45161). The method is useful for ameliorating the effects of psoriasis,

CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,

CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a

CC hyperneovascular condition such as a neovascular condition of the retina,

CC brain or skin, growth factor-mediated malignancies, other sclerotic

CC disease, kidney disease, hyperproliferation of the inside of blood

CC vessels or any other hyperplasia

XX Sequence 15 BP; 6 A; 2 C; 3 G; 4 T; 0 U; 0 Other;

SQ

Query Match 14.2%; Score 10.4; DB 1; Length 15;

Best Local Similarity 91.7%; Pred. No. 9.8e+02;

Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 919 CTTTGCCTTTA 930

Tb 15 CTTTGCCTTAA 4

|||||

RESULT 579

AAF48458/c

ID AAF48458 standard; DNA; 15 BP.

XX

AC AAF48458;

XX

DT 30-MAR-2001 (first entry)

XX

DE IGFBP3 oligonucleotide #1878.

XX

KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;

KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;

KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;

KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;

KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;

KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;

KW hyperneovascular condition; hyperplasia; kidney disease;

KW neovascular condition of the retina; ss.

XX

OS Homo sapiens.

XX

PN WO200078341-A1.

XX

PD 28-DEC-2000.

XX

PF 21-JUN-2000; 2000WO-AU000693.

XX

PR 21-JUN-1999; 99US-0140345P.

XX

PA (MURD-) MURDOCH CHILDRENS RES INST.

XX

PI Wraight CJ, Werther GA, Edmondson SR;

XX

DR WPI; 2001-041421/05.

XX

PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering

PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that

PT inhibits or reduces growth factor mediated cell proliferation and/or

PT inflammation.

XX

PS Example 7; Page 56; 201pp; English.

XX

CC The present invention relates to a method for ameliorating the effects of

CC skin disorders. The method comprises contacting the skin with an

CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1

CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of

CC inhibiting or reducing growth factor mediated cell proliferation,

inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia

Sequence 15 BP; 6 A; 3 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 15;

Best Local Similarity 91.7%; Pred. No. 9.8e+02; Indels 0; Gaps 0;

Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

919 CTTGGCTTTTA 930

|||||

14 CTTGGCTTTAA 3

RESULT 580

AF49434

AAF49434 standard; DNA; 15 BP.

AAF49434;

30-MAR-2001 (first entry)

IGF-I oligonucleotide #394.

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.

Homo sapiens.

WO200078341-A1.

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693.

21-JUN-1999; 99US-0140345P.

(MURD-) MURDOCH CHILDRENS RES INST.

Wright CJ, Werther GA, Edmondson SR;

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 8; Page 63; 201pp; English.

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis,

CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis, CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a CC hyperneovascular condition such as a neovascular condition of the retina, CC brain or skin, growth factor-mediated malignancies, other sclerotic CC disease, kidney disease, hyperproliferation of the inside of blood CC vessels or any other hyperplasia

SQ Sequence 15 BP; 2 A; 4 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 15;

Best Local Similarity 91.7%; Pred. No. 9.8e+02; Indels 0; Gaps 0;

Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 901 CTGGTCATTTTC 912

|||||

Db 1 CTGGTCATTTTC 12

RESULT 581

AAF48459/c

ID AAF48459 standard; DNA; 15 BP.

XX AAF48459;

XX 30-MAR-2001 (first entry)

IGFBP3 oligonucleotide #1879.

XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; XX cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; XX skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis; XX IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; XX growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba; XX keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; XX hyperneovascular condition; hyperplasia; kidney disease; XX neovascular condition of the retina; ss.

OS Homo sapiens.

XX WO200078341-A1.

XX 28-DEC-2000.

XX 21-JUN-2000; 2000WO-AU000693.

XX 21-JUN-1999; 99US-0140345P.

XX (MURD-) MURDOCH CHILDRENS RES INST.

XX Wright CJ, Werther GA, Edmondson SR;

XX WPI; 2001-041421/05.

XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering XX UV (ultra-violet) treatment (optional) and an antisense nucleic acid that XX inhibits or reduces growth factor mediated cell proliferation and/or XX inflammation.

XX Example 7; Page 56; 201pp; English.

XX The present invention relates to a method for ameliorating the effects of XX skin disorders. The method comprises contacting the skin with an XX antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 XX receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of XX inhibiting or reducing growth factor mediated cell proliferation, XX inflammation and/or other disorders. The present sequence is an XX oligonucleotide which can be used to design the antisense XX oligonucleotides of the present invention (see AAF45151 and AAF45153- XX F45161). The method is useful for ameliorating the effects of psoriasis, XX ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis, XX neoplasias, scleroderma, warts, benign growths, cancers of the skin, a XX hyperneovascular condition such as a neovascular condition of the retina, XX brain or skin, growth factor-mediated malignancies, other sclerotic

CC disease, kidney disease, hyperproliferation of the inside of blood
CC vessels or any other hyperplasia

XX Sequence 15 BP; 6 A; 2 C; 3 G; 4 T; 0 U; 0 Other;

SEQ Query Match 14.2%; Score 10.4; DB 1; Length 15;
Best Local Similarity 91.7%; Pred. No. 9.8e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 919 CTTTGCCTTTTA 930
DB 13 CTTTGCCTTTAA 2

RESULT 582
AAH45603
ID AAH45603 standard; DNA; 15 BP.
XX
AC AAH45603;
XX
DT 19-SEP-2001 (first entry)
XX

DE Human cystic fibrosis gene exon 10 mutant target sequence SEQ ID 9.
XX
XX Assay; mismatch detection; binding affinity; cystic fibrosis; exon 10;
KW human; mutant; ds.
XX

CS Homo sapiens.
CS Synthetic.
XX
XX WO200146467-A2.
FN
XX 28-JUN-2001.
PD

XX 21-DEC-2000; 2000WO-IB001930.
PP
XX 21-DEC-1999; 99US-00468679.
PR
XX (INGE-) INGENEUS CORP.
PA

PI Daksis JI, Picard P, Erikson GH;
XX
XX WPI; 2001-418088/44.
DR

PT Nucleic acid hybridization assay by adding target, probe and
PT intercalating agent to hybridization medium, irradiating test sample
PT formed, detecting radiation intensity, determining mismatch between probe
PT and target.

XX Example 3; Page 18; 56pp; English.
XX
CC This invention relates to an assay which involves adding a target nucleic
CC acid sequence, a probe complementary or imperfectly complementary to the
CC target sequence, and an intercalating agent to a hybridization medium to
CC form a test sample. The probe or intercalating agent contains a
CC fluorophore, the test sample is irradiated, and the intensity of the
CC fluorescent radiation emitted is detected. The extent of mismatch between
CC the probe and the target sequence is determined. The assay method is
CC useful for sequencing or assaying nucleic acids, preferably for assaying
CC triplex and duplex nucleic acid hybridization complexes. The assay is
CC also useful for identifying accessible regions in folded nucleotide
CC sequences, to determine the number of mismatched pairs in a hybridization
CC complex, and to map genomes. Other uses include the quantification of
CC binding affinity between the probe and target sequence, which is useful
CC for designing antisense drugs with optimized binding characteristics. The
CC present sequence represents a mutated fragment of exon 10 of the human
CC cystic fibrosis gene which is used as the target sequence in an example
CC illustrating the assay of the invention

XX Sequence 15 BP; 2 A; 2 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 15;
Best Local Similarity 91.7%; Pred. No. 9.8e+02;

Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 907 ATTTCTTTGGT 918
DB 3 ATCTTCTTTGGT 14

RESULT 583
AAS98357/c
ID AAS98357 standard; DNA; 15 BP.

XX
AC AAS98357;
XX
DT 12-MAR-2002 (first entry)
XX
DE Galanin receptor gene GALR1 allele-specific oligonucleotide #69.

XX Galanin receptor; GALR1; human; single nucleotide polymorphism; SNP;
KW drug discovery; haplotyping; infectious diarrhoea;
KW growth hormone deficiency; allele-specific oligonucleotide; ss.
XX

OS Homo sapiens.
XX
XX WO200179237-A2.
FN
XX 25-OCT-2001.
PD

XX 16-APR-2001; 2001WO-US012306.
PP
XX 14-APR-2000; 2000US-0197838P.
PR
XX (GENA-) GENAISSANCE PHARM INC.

XX Bentivegna SC, Chew A, Choi JY, Denton RR, Nandabalan K;
PI
XX WPI; 2002-066341/09.
DR

XX Genotyping human galanin receptor gene of an individual for determining
PT haplotype of an individual, involves determining the identity of
PT nucleotide pair at specific polymorphic sites for two copies of the gene.
XX
XX Claim 16; Page 15; 99pp; English.

XX The invention relates to genotyping human galanin receptor (GALR1) gene
CC of an individual, involving determining for the two copies of the GALR1
CC gene present in the individual, the identity of the nucleotide pair at
CC one or more polymorphic sites. The method is useful for determining
CC whether an individual has a haplotype or haplotype pairs defined in the
CC specification. This is useful for improving the efficacy and reliability
CC of several steps in the discovery and development of drugs for treating
CC diseases associated with GALR1 activity, e.g., infectious diarrhoea and
CC growth hormone deficiency, to validate GALR1 as a candidate agent for
CC treating a specific condition or disease predicted to be associated with
CC GALR1 activity, and in the design of clinical trials of candidate drugs
CC for treating a specific condition or disease predicted to be associated
CC with GALR1 activity. The method is useful to screen for compounds
CC targeting GALR1 to treat a specific condition or disease associated with
CC GALR1 activity. A GALR1 polynucleotide or variant is useful in studying
CC the expression and function of GALR1, and in expressing GALR1 protein for
CC use in screening for candidate drugs to treat diseases related to GALR1
CC activity. The polynucleotide or variant is useful for studying expression
CC of the GALR1 isogenes in vivo, for in vivo screening and testing of drugs
CC targeted against GALR1 protein, and for studying the effect of the
CC variation on the biological activity of GALR1 as well as on the binding
CC affinity of candidate drugs targeting GALR1 for the treatment of
CC infectious diarrhoea and growth hormone insufficiency. AAS98289- AAS98408
CC represent human GALR1 gene allele-specific oligonucleotides used to
CC detect GALR1 gene polymorphisms as described in the method of the
CC invention

XX Sequence 15 BP; 8 A; 1 C; 2 G; 3 T; 0 U; 1 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 15;

Best Local Similarity 78.6%; Pred. No. 9.8e+02;
Matches 11; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

907 ATTTCCTTGGTCT 920
|:|||||:
15 AYTTCCTTAGTAT 2

RESULT 584
L38353
AAL38353 standard; DNA; 15 BP.
AAL38353;
15-AUG-2002 (first entry)
ASO primer for detecting SCYA7 gene polymorphism SEQ ID 15.
Small inducible cytokine A7; SCYA7; polymorphic variant; haplotyping;
inflammatory disorder; cancer; haplotype; single nucleotide polymorphism;
genotype; human; ASO; PCR; primer; ss.
Homo sapiens.
WO200226771-A2.
04-APR-2002.
01-OCT-2001; 2001WO-US030880.
29-SEP-2000; 2000US-0236989P.
(GENA-) GENAISSANCE PHARM INC.
Chew A, Choi JY, Koshy B;
WPI; 2002-426009/45.
Novel small inducible cytokine A7 gene useful for therapeutic purposes,
for studying the expression and function of the polynucleotide, and for
expressing the cytokine protein.

Claim 14; Page 12; 54pp; English.
The invention relates to an isolated small inducible cytokine A7 (SCYA7)
polynucleotide comprising a nucleotide sequence which is a polymorphic
variant of a reference sequence for the SCYA7 cDNA or its fragment. The
polymorphic variant SCYA7 gene is useful in screening for drugs
targeting, which comprises contacting the SCYA7 gene with a candidate
agent and assaying for binding activity. The SCYA7 gene and a recombinant
nonhuman organism are useful in studying the expression and function of
SCYA7, and in expressing SCYA7 protein for use in screening for candidate
drugs to treat diseases related to SCYA7 activity such as inflammatory
disorders, and cancer. Haplotyping the SCYA7 gene of an individual and
identifying the association between a trait and at least one haplotype/
haplotype pair are useful in developing diagnostic tests and therapeutic
treatments for diseases associated with SCYA7 activity. Haplotyping the
SCYA7 gene of an individual is also useful in the design of clinical
trials of candidate drugs for treating specific conditions or diseases
associated with SCYA7 activity. Genotyping the SCYA7 gene of an
individual is useful in determining whether an individual has one of the
haplotypes or one of the haplotype pairs. An isolated oligonucleotide
probe of SCYA7 and the kit for haplotyping/genotyping the SCYA7 gene are
useful in genotyping and/or haplotyping the SCYA7 gene in an individual.
This polynucleotide sequence represents an ASO primer used for detecting
polymorphisms in the SCYA7 gene of the invention

Sequence 15 BP; 1 A; 2 C; 3 G; 8 T; 0 U; 1 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 15;
Best Local Similarity 78.6%; Pred. No. 9.8e+02;
Matches 11; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 935 TCCTCTTCATTGGT 948
|||:|||||:
Db 2 TCTCTTCATTGGT 15

RESULT 585
AAS98789/c
AAS98789 standard; DNA; 15 BP.
AAS98789;
26-MAR-2002 (first entry)
Colony stimulating factor 1 receptor (CSF1R) oligonucleotide #155.
Colony stimulating factor 1 receptor; CSF1R; polymorphic variant;
myeloid malignancy; inflammatory disorder; transgenic animal; haplotype;
genotype; human; allele specific oligonucleotide; ASO; primer; ss.
Homo sapiens.
WO200179225-A2.
25-OCT-2001.
12-APR-2001; 2001WO-US012044.
12-APR-2000; 2000US-0196411P.
(GENA-) GENAISSANCE PHARM INC.
Chew A, Choi JY, Koshy B;
WPI; 2002-075058/10.
Novel polymorphic variants of colony stimulating factor 1 receptor useful
in studying expression and function of the protein, useful for screening
candidate drugs to treat diseases e.g. inflammatory disorders.
Claim 15; Page 17; 164pp; English.

The invention describes a novel isolated polynucleotide (I) comprising a
sequence which is a polymorphic variant (PV) of a reference sequence for
colony stimulating factor 1 receptor (CSF1R) gene, found on the
polypeptide are useful for improving the discovery and development of
drugs for treating diseases associated with CSF1R activity, e.g.,
malignant histiocytosis, myeloid malignancies, and inflammatory disorders
and the haplotypes can be used to validate CSF1R as a candidate target
for treating a specific condition or disease predicted to be associated
with CSF1R activity. Genotyping the CSF1R gene of an individual can also
be used in developing diagnostic tests and therapeutic treatments. (I) is
useful in studying the expression and function of CSF1R, and in
expressing CSF1R protein for use in screening for candidate drugs to
treat diseases related to CSF1R activity and in studying the effect of
the variation on the biological activity of CSF1R as well as on the
binding affinity of candidate drugs targeting CSF1R. Antibodies are
useful in a variety of diagnostic and prognostic formats and therapeutic
methods. A transgenic animal is useful in studying expression of the
CSF1R isogenes in vivo, for in vivo screening and testing of drugs
targeted against CSF1R protein, and for testing the efficacy of
therapeutic agents and compounds. Allele specific oligonucleotides (ASO)
are useful as probes and primers, and for assaying a polymorphism in the
target region. Without requiring any a priori knowledge of the phenotypic
effect of any particular CSF1R or haplotype the invention provides a
method for identifying lead compounds that are more likely to show
efficacy in clinical trials. This sequence is an allele specific
oligonucleotide primer used for detecting CSF1R gene polymorphisms,
described in the method of the invention

Sequence 15 BP; 7 A; 3 C; 4 G; 0 T; 0 U; 1 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 15;

Best Local Similarity 78.6%; Pred. No. 9.8e+02;
Matches 11; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 901 CTGGTCATTTCCTT 914
DB 15 CYGGCTTTTTCCTT 2

RESULT 586
AAS98652/c
ID AAS98652 standard; DNA; 15 BP.
AC AAS98652;
XX
XX
XX
XX 26-MAR-2002 (first entry)
XX
XX Colony stimulating factor 1 receptor (CSF1R) oligonucleotide #18.
XX
XX Colony stimulating factor 1 receptor; CSF1R; polymorphic variant;
FW cytosstatic; gene therapy; malignant histiocytosis; isogene;
FW myeloid malignancy; inflammatory disorder; transgenic animal; haplotype;
KW genotype; human; allele specific oligonucleotide; ASO; probe; ss.
XX
CS Homo sapiens.
XX
XX WO200179225-A2.
XX
XX 25-OCT-2001.
XX
XX 12-APR-2001; 2001WO-US012044.
XX
XX 12-APR-2000; 2000US-0196411P.
XX
XX (GENA-) GENAISSANCE PHARM INC.
XX
XX Chew A, Choi JY, Koshi B;
XX WPI; 2002-075058/10.
XX
XX Novel polymorphic variants of colony stimulating factor 1 receptor useful
XX in studying expression and function of the protein, useful for screening
XX candidate drugs to treat diseases e.g. inflammatory disorders.
XX
XX Claim 15; Page 15; 164pp; English.
XX
XX The invention describes a novel isolated polynucleotide (I) comprising a
XX sequence which is a polymorphic variant (PV) of a reference sequence for
XX colony stimulating factor 1 receptor (CSF1R) gene, found on The
XX polypeptide are useful for improving the discovery and development of
XX drugs for treating diseases associated with CSF1R activity, e.g.,
XX malignant histiocytosis, myeloid malignancies, and inflammatory disorders
XX and the haplotypes can be used to validate CSF1R as a candidate target
XX for treating a specific condition or disease predicted to be associated
XX with CSF1R activity. Genotyping the CSF1R gene of an individual can also
XX be used in developing diagnostic tests and therapeutic treatments. (I) is
XX useful in studying the expression and function of CSF1R, and in
XX expressing CSF1R protein for use in screening for candidate drugs to
XX treat diseases related to CSF1R activity and in studying the effect of
XX the variation on the biological activity of CSF1R as well as on the
XX binding affinity of candidate drugs targeting CSF1R. Antibodies are
XX useful in a variety of diagnostic and prognostic formats and therapeutic
XX methods. A transgenic animal is useful in studying expression of the
XX CSF1R isogenes in vivo, for in vivo screening and testing of drugs
XX targeted against CSF1R protein, and for testing the efficacy of
XX therapeutic agents and compounds. Allele specific oligonucleotides (ASO)
XX are useful as probes and primers, and for assaying a polymorphism in the
XX target region. Without requiring any a priori knowledge of the phenotypic
XX effect of any particular CSF1R or haplotype the invention provides a
XX method for identifying lead compounds that are more likely to show
XX efficacy in clinical trials. This sequence is an allele specific
XX oligonucleotide probe used for detecting CSF1R gene polymorphisms,
XX described in the method of the invention

SQ Sequence 15 BP; 5 A; 1 C; 7 G; 1 T; 0 U; 1 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 15;
Best Local Similarity 78.6%; Pred. No. 9.8e+02;
Matches 11; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 929 TATCCCTCTCTCTC 942
DB 14 TGTCCCYACTCTTC 1

RESULT 587
AAD45257/c
ID AAD45257 standard; DNA; 15 BP.
XX
XX AAD45257;
AC
XX
XX 27-DEC-2002 (first entry)
XX
XX Human PON-1 gene polymorphism detecting ASO primer #13.
XX
XX Human; paraoxonase 1; PON1; single nucleotide polymorphism; transgenic;
KW SNP; drug screening; organo-phosphorous metabolism; target validation;
KW atherosclerosis; type II diabetes; gene therapy; antilipemic; primer;
KW allele specific oligonucleotide; ASO; ss.
XX
XX Homo sapiens.
OS
XX
XX WO200266680-A1.
PN
XX
XX 29-AUG-2002.
PD
XX
XX 06-DEC-2001; 2001WO-US046896.
PF
XX
XX 16-FEB-2001; 2001WO-US005126.
PR
XX
XX (GENA-) GENAISSANCE PHARM INC.
PA
XX
XX Anastasio AE, Chew A, Choi JY, Denton RR, Nandabalan K, Parks KE;
PI Stephens JC;
XX
XX WPI; 2002-682769/73.
DR
XX
XX New genetic variants of human paraoxonase 1 (PON1) gene with
XX polymorphisms, useful for treating disorders associated with PON1 isogene
XX activity e.g. atherosclerosis or diabetes, or for screening drugs for
XX treating these diseases.
XX
XX Claim 15; Page 15; 118pp; English.
XX
XX The invention relates to methods for haplotyping human paraoxonase 1
XX (PON1) gene. It also relates to the single nucleotide polymorphisms (SNP)
XX in PON-1 gene. Polymorphic variants of the PON1 gene are useful in
XX studying the expression and function of PON1, and in expressing PON1
XX proteins for use in screening candidate drugs to treat diseases
XX associated with PON1 activity, e.g. disorders of lipid and organo-
XX phosphorous metabolism such as atherosclerosis or type II diabetes. They
XX are also used in gene therapy. Establishing PON1 haplotype or haplotype
XX pair of an individual is useful for improving the efficiency and
XX reliability of several steps including target validation, in the
XX discovery and development of drugs for treating diseases associated with
XX PON1 activity. Transgenic animals are useful for studying expression of
XX the PON1 isogenes in vivo. The present sequence is an allele specific
XX oligonucleotide (ASO) primer used to detect human PON-1 gene
XX polymorphisms
XX
XX SQ Sequence 15 BP; 6 A; 4 C; 1 G; 3 T; 0 U; 1 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 15;
Best Local Similarity 91.7%; Pred. No. 9.8e+02;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 945 TGGTTTAAATGTA 956

||||| |||||
13 TGGTCAATGTA 2

RESULT 588
ABK96346 standard; DNA; 15 BP.
ABK96346;
24-SEP-2002 (first entry)
Human SA homologue, SAH, allele specific primer #2.
Human; ss; primer; rat hypertension-associated homologue; SAH;
hypertension; chromosome 16p13.11; hypertensive; SNP; PCR;
single nucleotide polymorphism; haplotype; genotype; isogene.
Homo sapiens.
WO200244201-A2.
06-JUN-2002.
03-DEC-2001; 2001WO-US047011.
01-DEC-2000; 2000US-0250441P.
(GENA-) GENAISSANCE PHARM INC.
Bieglecki KM, Chew A, Russo DP;
WPI; 2002-519582/55.
Novel genetic variants of SA (Rat Hypertension-associated) Homolog
isogenes, useful for improving efficiency and reliability in drug
development for treating hypertension.
Claim 15; Page 14; 98pp; English.

The invention relates to an isolated polynucleotide (I) comprising a
first nucleotide sequence (NS1) comprising SAH (SA, Rat Hypertension-
associated Homologue isogene (II) selected from isogenes 1-15 and 17-20
given in the specification, where each isogene comprises the regions of
NS1 and is further defined by the corresponding sequence of single
nucleotide polymorphisms or a second nucleotide sequence (NS2)
complementary to NS1. Alternatively, (I) comprises a coding sequence for
SAH isogenes or fragments. Also included are methods of predicting the
haplotype/genotype of the SAH gene of an individual, identifying an
association between a trait and at least one haplotype or haplotype pair
of SAH genes, an isolated oligonucleotide for detecting a polymorphism in
the SAH gene, a recombinant non-human organism transformed or transfected
with the SAH polynucleotide, an isolated polypeptide comprising an amino
acid sequence which is a polymorphic variant of the SAH protein, a
monoclonal antibody specific for SAH, a computer system for storing and
analysing polymorphism data for the SAH gene and a genome anthology for
the SAH gene. The SAH proteins and haplotype/genotype methods are useful
in screening for drugs targeting SAH that are useful for treating
hypertension and for drug discovery, development and target validation.
The antibody is useful in diagnostic, prognostic and therapeutic methods.
The polynucleotides are useful in studying the expression and function of
SAH, in expressing SAH protein for use in screening for candidate drugs
and in studying the effect of the variation on the biological activity of
SAH as well as on the binding affinity of candidate drugs targeting SAH.
The gene for SAH is located on chromosome 16p13.11. The present sequence
is an allele specific primer for detecting SAH nucleic acids bearing a
polymorphism

Sequence 15 BP; 0 A; 6 C; 1 G; 7 T; 0 U; 1 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 15;
Best Local Similarity 78.6%; Pred. No. 9.8e+02;
Matches 11; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 928 TTATCCCTCTCTT 941
||| ||||| |||
Db 2 TTCTCCCTCTCTT 15

RESULT 589
ABQ88644/c
ID ABQ88644 standard; DNA; 15 BP.
XX
AC ABQ88644;
XX
DT 23-SEP-2002 (first entry)
XX
DE Human CFL1 ASO probe #3.
XX
XX Human; cofillin 1; CFL1; gene therapy; antisense gene therapy;
KW immunological disorder; ASO; allele-specific oligonucleotide; probe; ss.
XX
OS Homo sapiens.
XX
PN WO200194376-A1.
XX
PD 13-DEC-2001.
XX
PF 11-JUN-2001; 2001WO-US018815.
XX
PR 09-JUN-2000; 2000US-0210884P.
XX
PA (GENA-) GENAISSANCE PHARM INC.
XX
PI Anastasio AE, Duda A, Klien SE, Koshy B, Sausker EA;
XX
XX WPI; 2002-566437/60.
XX
PT Novel genetic variants of human cofillin 1, CFL1 gene for studying
PT expression, function of the gene and expressing CFL1 protein useful in
PT identifying drugs to treat immunological disorders.
XX
PS Claim 17; Page 13; 84pp; English.

XX The invention relates to a novel polynucleotide sequence which is a
CC polymorphic variant of a reference sequence for the cofillin 1 (non-
CC muscle) (CFL1) gene or its fragment, or a polymorphic variant of a
CC reference sequence for a CFL1 cDNA or its fragment. The polynucleotide of
CC the invention may have a use in gene therapy, and in antisense gene
CC therapy. The polynucleotide is useful for studying the expression and
CC function of CFL1 and expressing CFL1 protein for use in screening for
CC candidate drugs to treat diseases related to CFL1 activity. The
CC polymorphism and haplotype data are useful for validating whether CFL1 is
CC a suitable target for drugs to treat immunological disorders, screening
CC for such drugs and reducing bias in clinical trials of such drugs. The
CC present sequence represents one of a set of allele-specific
CC oligonucleotide (ASO) probes used in the invention to detect
CC polymorphisms in the CFL1 gene
XX
SQ Sequence 15 BP; 6 A; 2 C; 3 G; 3 T; 0 U; 1 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 15;
Best Local Similarity 78.6%; Pred. No. 9.8e+02;
Matches 11; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 942 CATTGGTTTAATGT 955
||||| |||||
Db 15 CATTGGTYCAATTT 2

RESULT 590
ABT05325
ID ABT05325 standard; DNA; 15 BP.
XX
AC ABT05325;
XX

```

JT 24-OCT-2002 (first entry)
XX Human N-acetylgalactosaminidase (NAGA) alpha gene ASO primer 17.
DE
XX
XX Human; PCR; primer; ss; gene therapy; N-acetylgalactosaminidase alpha;
KW Chromosome 22q13.2-q13.31; lysosomal glycohydrolase; screening; SNP;
KW NAGA-related disease; single nucleotide polymorphism; haplotyping; NAGA;
XX genotyping.
XX Homo sapiens.
OS
XX WO2001094637-A1.
XX
XX 13-DEC-2001.
PD
XX
XX 07-JUN-2001; 2001WO-US018456.
PF
XX
XX 07-JUN-2000; 2000US-0210110P.
PR
XX (GENA-) GENAISSANCE PHARM INC.
PA
XX Duda A, Kazemi A, Koshy B, Parks KE;
PI
XX WPI; 2002-566449/60.
XX
XX New genetic variants of isolated N-acetylgalactosaminidase (NAGA), Alpha
PT gene, useful for therapeutic purposes, for studying the expression and
PT function of the polynucleotide, and for expressing NAGA protein.
XX
XX Claim 16; Page 13; 91pp; English.
XX
XX The invention comprises the amino acid and coding sequence of the human N
CC -acetylgalactosaminidase (NAGA) alpha protein. The invention specifically
CC comprises novel polymorphic sites identified within the NAGA gene. The
CC NAGA gene is located on chromosome 22q13.2-q13.31, and encodes a
CC lysosomal glycohydrolase that cleaves alpha-N-acetylgalactosaminyl
CC moieties in glycoconjugates. The NAGA DNA and protein sequences of the
CC invention are useful for studying the expression and function of NAGA and
CC for screening candidate drugs to treat diseases related to NAGA activity.
CC The NAGA gene polymorphisms identified in the present invention are
CC useful for haplotyping and genotyping the NAGA gene of an individual. The
CC present DNA sequence represents an N-acetylgalactosaminidase gene allele-
CC specific oligonucleotide primer
XX
XX Sequence 15 BP; 1 A; 5 C; 3 G; 5 T; 0 U; 1 Other;
SQ
Query Match 14.2%; Score 10.4; DB 1; Length 15;
Best Local Similarity 78.6%; Pred. No. 9.8e+02;
Matches 11; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
QY 915 TGGTCTTGCTTTT 928
Db 1 TGGACTCTGCCTTY 14
:|||||
RESULT 591
ABK28515/c
ID ABK28515 standard; DNA; 15 BP.
XX
XX ABK28515;
AC
XX
XX 09-APR-2002 (first entry)
ET
XX
XX Paraoxonase 2 (PON2), allele specific oligonucleotide primer #22.
DE
XX
XX Paraoxonase 2; PON2; coronary heart disease; ASO;
KW allele specific oligonucleotide; primer; ss.
XX
XX Homo sapiens.
OS
XX WO200188202-A1.
XX
XX 22-NOV-2001.
PD
18-MAY-2001; 2001WO-US016352.
XX
XX 18-MAY-2000; 2000US-0205145P.
PR
XX (GENA-) GENAISSANCE PHARM INC.
PA
XX Anastasio AE, Chew A, Choi JY, Denton RR, Lee HH, Nandabalan K;
PI
XX WPI; 2002-121985/16.
XX
XX An isolated polynucleotide comprising a paroxonase 2 (PON2) isogene
PT encodes a pharmaceutically important protein for the identification of
PT polymorphisms at the PON2 locus.
XX
XX Claim 17; Page 13; 125pp; English.
XX
XX The invention describes an isolated polynucleotide sequence comprising a
CC paroxonase 2 (PON2) isogene. Primers and probes allow identification of
CC this sequence and its polymorphisms and are useful for identifying which
CC isoform of paroxonase 2 a person carries. Identification of a PON2
CC isoform allows tailored pharmaceutical treatment to be designed and
CC administered. PON2 is a particularly important gene for the treatment of
CC coronary heart disease. This sequence represents an allele specific
CC oligonucleotide (ASO) primer used for detecting PON2 gene polymorphisms,
CC described in the method of the invention
XX
XX Sequence 15 BP; 8 A; 0 C; 5 G; 1 T; 0 U; 1 Other;
SQ
Query Match 14.2%; Score 10.4; DB 1; Length 15;
Best Local Similarity 78.6%; Pred. No. 9.8e+02;
Matches 11; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
QY 917 GCTTTGCTTTTA 930
Db 14 RTCCTTCTCTTA 1
:|||||
RESULT 592
ABX01229
ID ABX01229 standard; RNA; 15 BP.
XX
XX ABX01229;
AC
XX
XX 23-DEC-2002 (first entry)
DT
XX
XX Hepatitis C virus substrate #1011 for HCV hammerhead ribozyme #1011.
DE
XX
XX Enzymatic nucleic acid; RNA cleavage; Hepatitis C virus infection;
KW HCV ribozyme; HCV expression; HCV replication; cirrhosis; virucide;
KW liver failure; hepatocellular carcinoma; HCV infection; drug therapy;
KW type I interferon; interferon alpha; interferon beta; cytostatic;
KW interferon gamma; consensus interferon; hepatotropic; antiinflammatory;
KW substrate; hammerhead ribozyme; HH ribozyme; ss.
XX
XX Hepatitis C virus.
OS
XX
XX US2002082225-A1.
FN
XX
XX 27-JUN-2002.
PD
XX
XX 23-MAR-1999; 99US-00274553.
PF
XX
XX 23-MAR-1999; 99US-00274553.
PR
XX (BLAT/) BLATT L.
XX (MCSW/) MCSWIGGEN J A.
XX (ROBE/) ROBERTS B.
XX (PAVC/) PAVCO P A.
XX (MACE/) MACEJACK D.
XX
XX Blatt L, Mcswiggen JA, Roberts B, Pavco PA, Macejack D;
PI
XX

```

WPI; 2002-617759/66.

New ribozymes targeting RNA derived from hepatitis C virus inhibit viral replication and are useful to treat hepatitis C virus infections and cirrhosis, liver failure or hepatocellular carcinoma.

Claim 1; Page 50; 80pp; English.

The present invention relates to enzymatic nucleic acids which specifically cleave RNA derived from Hepatitis C virus (HCV). The enzymatic nucleic acid or ribozyme is in a hammerhead (HH) or hairpin (HP) motif where the binding arms comprise sequences complementary to one of the substrate sequences defined in the specification. The HCV ribozymes are useful for modulating the expression and/or replication of HCV. They can be used to treat cirrhosis, liver failure and/or hepatocellular carcinoma. The HCV ribozymes are also useful for treating a condition associated with HCV infection in conjunction with one or more other drug therapies, particularly type I interferon, especially interferon alpha, beta or gamma or consensus interferon. The present sequence represents a substrate for a HCV hammerhead (HH) ribozyme. Note: Some of the sequence data for this patent did not form part of the printed specification. The complete sequence data for this patent was obtained in electronic format directly from the USPTO web site at seqdata.uspto.gov/psipdsIDentry.html

Sequence 15 BP; 3 A; 6 C; 1 G; 0 T; 5 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 15;
Best Local Similarity 58.3%; Pred. No. 9.8e+02;
Matches 7; Conservative 4; Mismatches 1; Indels 0; Gaps 0;

/ 932 CCTCCTCTTCA 943
|:|:|:|:|:|:
3 4 CCCUCCUGUUA 15

35ULT 593

ABL36360/C
ABL36360 standard; DNA; 15 BP.

ABL36360;

22-APR-2002 (first entry)

Human lysosomal acid phosphatase 2 (ACP2) allele-specific PCR primer 40.

Human; ss; lysosomal acid phosphatase 2; ACP2; gene; chromosome 11;
lysosome-specific enzyme; orthophosphoric monoester hydrolysis;
Hodgkin's disease; HD; acid phosphatase deficiency;
novel polymorphic site; ACP2 haplotype; ACP2 genotype; polymorphism;
transgenic animal; primer; probe; primer-extension oligonucleotide; SNP;
single nucleotide polymorphism.

Homo sapiens.

WC0200194362-A2.

13-DEC-2001.

07-JUN-2001; 2001WO-US018457.

07-JUN-2000; 2000US-0210047P.

(GENA-) GENAISANCE PHARM INC.

Kliem SE, Messer C, Tanguay DA;

WPI; 2002-154563/20.

Novel genetic variants of acid phosphatase 2, lysosomal polypeptide gene useful in studying expression and function of the protein, and for screening drugs to treat diseases e.g. Hodgkin's disease.

Claim 17; Page 14; 109pp; English.

The invention comprises the human lysosomal acid phosphatase 2 (ACP2) nucleic acid and protein sequences. Specifically, the invention relates to the discovery of 22 novel polymorphic sites within the ACP2 gene. The invention also comprises methods for haplotyping and genotyping the ACP2 gene in an individual. The ACP2 gene (located on chromosome 11) encodes a lysosomal-specific enzyme that catalyses the hydrolysis of orthophosphoric monoesters to alcohol and phosphate. The ACP2 gene and protein are pharmacologically important in the treatment of Hodgkin's disease (HD) and acid phosphatase deficiency. The novel ACP2 gene polymorphisms of the invention are useful in haplotyping the ACP2 gene. ACP2 haplotyping is useful in validating ACP2 as a target (and designing drugs) for treating an ACP2-related disease or condition (e.g. Hodgkin's disease and acid phosphatase deficiency). The ACP2 gene polymorphisms are useful for ACP2 genotyping, which can also be used to develop diagnostic tests and therapeutic treatments. The ACP2 protein and nucleic acids of the invention are useful in the production of a transgenic animal which expresses ACP2 protein. The ACP2 nucleic acids of the invention are useful in the production of allele-specific oligonucleotides designed to represent each of the ACP2 polymorphisms. Nucleic acids ABL36299-ABL36320 represent claimed ACP2 allele-specific probes. Nucleic acids ABL36321-ABL36364 represent claimed ACP2 allele-specific PCR primers. Nucleic acids ABL36365-ABL36408 represent claimed ACP2 primer-extension oligonucleotides

Sequence 15 BP; 5 A; 1 C; 6 G; 2 T; 0 U; 1 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 15;
Best Local Similarity 78.6%; Pred. No. 9.8e+02;
Matches 11; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 933 CCTCCTCTTCAATG 946
|:|:|:|:|:|:
Db 15 CTTCTCTCTCATAG 2

RESULT 594

ABZ95465

ID ABZ95465 standard; DNA; 15 BP.

AC ABZ95465;

17-OCT-2003 (first entry)

Human endothelin-1 antisense fragment no.1329.

Human; antisense; lung dysfunction; nasal airway dysfunction;
antiinflammatory steroid; ubinone; antinflammatory; antiallergic;
asthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
antisense gene therapy; respiratory; lung; adenosine sensitivity;
adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
lung inflammation; respiratory disease; ds.

Homo sapiens.

WO200285308-A2.

31-OCT-2002.

23-APR-2002; 2002WO-US013135.

24-APR-2001; 2001US-0286137P.

(EPIG-) EPIGENESIS PHARM INC.

Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
Miller S, Tang L, Shahabuddin S;

WPI; 2003-229219/22.

Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its

PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

PS Disclosure; SEQ ID NO 10707; 872pp; English.

XX
 XX
 CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences

XX Sequence 15 BP; 0 A; 4 C; 1 G; 10 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 15;
 Best Local Similarity 91.7%; Pred. No. 9.8e+02;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

CY 917 GTCCTTGCCTTT 928

Db 1 GTCCTTGCCTTT 12

RESULT 595

ABZ95455
 ID ABZ95455 standard; DNA; 15 BP.

AC ABZ95455;

XX 17-OCT-2003 (first entry)

XX Human endothelin-1 antisense fragment no.1319.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiasthmatic;
 XX antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 XX antisense gene therapy; respiratory; lung; adenosine sensitivity;
 XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 XX lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 XX Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its

PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

PS Disclosure; SEQ ID NO 10697; 872pp; English.

XX
 XX
 CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of ubiquinone or
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences

XX Sequence 15 BP; 0 A; 4 C; 1 G; 10 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 15;
 Best Local Similarity 91.7%; Pred. No. 9.8e+02;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

CY 917 GTCCTTGCCTTT 928

Db 1 GTCCTTGCCTTT 12

RESULT 596

AAD54792/C
 ID AAD54792 standard; DNA; 15 BP.

AC AAD54792;

XX 26-JUN-2003 (first entry)

XX Human cystic fibrosis gene specific probe No. 8.

XX Nucleic acid multiplex; Watson-Crick duplex; drug designing; human;
 XX cystic fibrosis; probe; ss.

XX Homo sapiens.

XX WO2002103051-A2.

XX 27-DEC-2002.

XX 31-MAY-2002; 2002WO-IB001972.

XX 20-JUN-2001; 2001US-00885731.

XX (INGE-) INGENEUS CORP.

XX Erikson GH, Daksis JI, Kandic I, Picard P;

XX WPI; 2003-183992/18.

XX Forming nucleic acid multiplex, particularly triplexes and quadruplexes,
 PT by using accelerator agents such as cations to create them.

XX Example 12; Page 76; 61pp; English.

XX The invention relates to a method for forming nucleic acid multiplex,
 CC particularly triplexes and quadruplexes, by using accelerator agents such

XX 29-DEC-1998 (first entry)
 XX Primer KC164 used in the method of the invention.
 DE PCR; primer; amplification; single chain T-cell receptor; scTCR; Vbc;
 XX bacteriophage coat protein; BCP; V-alpha chain; Vac; V-beta chain;
 KW immune response; T-cell receptor; TCR; cancer; allergy; T lymphocyte; ss.
 OS Synthetic.
 XX WO9839482-Al.
 XX 11-SEP-1998.
 PD 05-MAR-1998; 98WO-US004274.
 PF 07-MAR-1997; 97US-00813781.
 PR (SUNO-) SUNOL MOLECULAR CORP.
 PA Weidanz JA, Card KF, Wong HC;
 XX WPI; 1998-506374/43.
 XX New soluble T cell receptor fusion proteins - comprise V-alpha chain,
 PT peptide linker, V-beta chain and bacteriophage coat protein, used to,
 PT e-g. develop products for modulating immune responses.
 XX Disclosure; Fig 21D; 150pp; English.
 XX The present primer was used to construct DNA vectors which were used in
 CC the method of the invention. The invention provides single chain T-cell
 CC receptor (scTCR) fusion proteins which comprise of a bacteriophage coat
 CC protein (BCP; e-g. gene III or VIII product) covalently linked to a scTCR
 CC comprising of a V-alpha chain (Vac) covalently linked to a V-beta chain
 CC (Vbc) by a peptide linker sequence. The BCP increases solubility of the
 CC scTCR fusion proteins, thereby enhancing yield and functionality. The
 CC scTCR fusion proteins are fully soluble and functional, and can be
 CC isolated in significant quantities without performing difficult
 CC solubilisation, cleaving or re-folding steps. The scTCR fusion proteins
 CC can be produced in a variety of formats including bacteriophage display
 CC libraries to screen for binding molecules which specifically bind the
 CC scTCR fusion proteins. The scTCRs are claimed to be useful for reducing
 CC an immune response by competing with an antigen with T-cell receptors
 CC (TCR) occurring on pathogenic T cells such as those accompanying cancer,
 CC infectious disease, allergy, etc. The scTCRs are also claimed to be
 CC useful for inducing an immune response for immunisation against TCR
 CC structures to reduce or eliminate the pathogenic or undesirable effects
 CC of T cells, and they can also be used for the production of antibodies
 CC and in diagnostic applications
 XX Sequence 16 BP; 8 A; 5 C; 3 G; 0 T; 0 U; 0 Other;
 SQ Query Match 14.2%; Score 10.4; DB 1; Length 16;
 Best Local Similarity 91.7%; Pred. No. 1e+03;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 917 GTCTTTGCCCTT 928
 DB 13 GTCTTTGCCGTT 2
 RESULT 600
 ID AAX28404/c
 XX AAX28404 standard; DNA; 16 BP.
 AC AAX28404;
 XX 21-JUN-1999 (first entry)
 DT Probe for CCR5 gene.
 DE
 XX

KW Probe; CCR5 gene; non-synctia-inducing; HIV-1; mutation detection;
 KW chemokine receptor gene; infection; disease progression prediction; ss.
 OS Synthetic.
 XX WO9913112-Al.
 XX 18-MAR-1999.
 PD 14-SEP-1998; 98WO-US019007.
 PF 12-SEP-1997; 97US-00928465.
 PR (ALKU) AKZO NOBEL NV.
 PA Romano JW, Lee EM;
 XX WPI; 1999-263372/22.
 PT Determination of zygosity of CCR5 chemokine receptor gene in an
 PT individual.
 XX Claim 10; Page 24; 36pp; English.
 CC This sequence represents a probe for a region of the CCR5 gene. The
 CC invention relates to a method for the determination of susceptibility of
 CC an individual to non-synctia-inducing (NSI) forms of human
 CC immunodeficiency virus type 1 (HIV-1), by detecting whether the
 CC individual is homozygous mutant, heterozygous or homozygous wild type for
 CC the CCR5 chemokine receptor gene. The method can be used to predict
 CC susceptibility of an individual to infection by NSI forms of HIV-1 and
 CC for predicting disease progression
 XX Sequence 16 BP; 7 A; 3 C; 1 G; 5 T; 0 U; 0 Other;
 SQ Query Match 14.2%; Score 10.4; DB 1; Length 16;
 Best Local Similarity 91.7%; Pred. No. 1e+03;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 948 TTTAATGTATCG 959
 DB 13 TTTAATGTATCG 2
 RESULT 601
 ID AAX55357/c
 XX AAX55357 standard; DNA; 16 BP.
 AC AAX55357;
 XX 08-JUL-1999 (first entry)
 DT Soluble sc-TCR fusion protein constructing primer KC164.
 DE Fusion protein; soluble; immunoglobulin; Ig; sc-TCR; immune response;
 KW single-chain T-cell receptor; T cell activation; therapy; PCR primer; ss.
 XX Synthetic.
 OS WO9918129-Al.
 XX 15-APR-1999.
 PD 28-SEP-1998; 98WO-US020263.
 PF 02-OCT-1997; 97US-00943086.
 PR (SUNO-) SUNOL MOLECULAR CORP.
 PA Weidanz JA, Card KF, Wong HC;
 XX WPI; 1999-264000/22.
 DR
 XX

Soluble single-chain T cell receptor proteins.

Example; Fig 6D; 145pp; English.

The invention relates to a soluble fusion protein that comprises an immunoglobulin (Ig) light chain constant region or fragment, covalently linked to a single-chain T-cell receptor (sc-TCR) comprising a V-alpha chain covalently linked to a V-beta chain by a peptide linker sequence. The soluble fusion protein can induce an immune response in a mammal, so that the mammal is immunized against pathogenic T cell receptor epitopes. It can also be used to inhibit T-cell activation in a mammal. The sc-TCR can be used to kill a cell containing a TCR specific ligand. The sc-TCR proteins can be used in vitro to detect and analyze ligands such as peptides and MHC/HLA molecular components of TCR ligands. They can also be used to detect T-cells with pathogenic properties. Other uses include functional, cellular and molecular assays and structural analysis. In vivo the sc-TCRs can compete with pathogenic T cells or to raise antibodies for use in therapy. Fusion of an Ig light chain constant region to a sc-TCR facilitates soluble expression. The sc-TCR can be isolated in significant quantities without performing difficult solubilisation, cleaving or re-folding steps. The fusion also confers a means of detecting and purifying the fusion proteins by conventional immunological methods. Sequences AAX55301 to AAX55445 represent PCR primers used for constructing the fusion proteins of the invention

Sequence 16 BP; 8 A; 5 C; 3 G; 0 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 16;

Best Local Similarity 91.7%; Pred. No. 1e+03;

Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

917 GTCCTTGCGTTT 928

|||||

13 GTCCTTGCGTTT 2

35ULT 602

AX14780/C

AAX14780 standard; DNA; 16 BP.

AAX14780;

24-MAR-1999 (first entry)

Triple helix forming nucleotides 2771-2786 of Hepatitis B virus.

Triple-helix forming region; Triplex formation; DNA detection;

identification; bacteria; oncogene; virus; ds.

Hepatitis B virus.

US5861244-A.

19-JAN-1999.

22-DEC-1993; 93US-00173489.

29-OCT-1992; 92US-00968436.

(PROF-) PROFILE DIAGNOSTIC SCI INC.

Hepburn AG, Wang C;

WPI; 1999-130384/11.

Assay of genetic sequences based on triplex formation from double stranded analyte - and hybrid of anchor and reporter sequences, with reporter released if triplex formation occurs, used e.g. to identify bacteria.

Disclosure; Col 19-20; 168pp; English.

The present sequence represents a potential triple-helix forming region.

CC It can be used to demonstrate the assay of the invention. The assay
CC comprises adding a sample containing double-stranded DNA test sequences,
CC e.g. containing the present sequence, to an aqueous medium containing at
CC least one complex of anchor DNA, attached to a solid support, and
CC reporter DNA, where either a part of the anchor DNA or reporter DNA is
CC designed to form a triple-strand structure with part of the test
CC sequence. Triplex formation results in displacement of the reporter DNA
CC which is detected as an indication of the presence of the DNA test
CC sequence. The method is used to detect DNA sequences, particularly for
CC identification of bacteria (by detecting genes for ribosomal RNA) in
CC clinical samples, but also detection of oncogenes and Hepatitis B virus
XX

Sequence 16 BP; 8 A; 0 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 16;

Best Local Similarity 91.7%; Pred. No. 1e+03;

Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

933 CCTCCTCTTCAT 944

|||||

15 CTTCTCTTCAT 4

RESULT 603

AAH46691

AAH46691 standard; DNA; 16 BP.

AAH46691;

19-SEP-2001 (first entry)

Target virus detection probe #12.

Target virus detection probe; FRET; labelled probe;

fluorescence resonance energy transfer; ss.

Synthetic.

Key Location/Qualifiers

modified_base 12

/*tag= a

/mod_base= OTHER

/note= "modified by Cy5"

JP2000312589-A.

14-NOV-2000.

16-JUL-1999; 99JP-00203474.

04-MAR-1999; 99JP-00057132.

(BUNS-) BUNSHI BIOHOTOONICS KENKYUSHO KK.

WPI; 2001-400707/43.

Detecting a virus comprises a probe formed between at least two same energy donor fluorescent pigments (dfp) and an energy acceptor fluorescent pigment (afp) in which the energy from (dfp) is relayed to (afp) successively and transferred.

Disclosure; Page 10; 40pp; Japanese.

The present invention describes a method of detecting a target virus using fluorescence resonance energy transfer (FRET), involving reacting with a labelled probe formed between at least two same energy donor fluorescent pigments and an energy acceptor fluorescent pigment in which the energy from the former is relayed to the latter successively and transferred. The probe can be used for the detection of a target virus. The present sequence is a probe described in the exemplification of the invention

Sequence 16 BP; 3 A; 1 C; 3 G; 9 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 16;
 Best Local Similarity 91.7%; Pred. No. 1e+03; 0; Mismatches 1; Indels 0; Gaps 0;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 905 TCATTTTCCTTG 916
 | | | | | | | | | |
 DB 1 TCATTTTCCTTG 12

RESULT 604
 AAS15890/c
 ID AAS15890 standard; DNA; 16 BP.
 XX
 AC AAS15890;
 XX
 DT 23-JAN-2002 (first entry)
 XX
 DE Target feature for primer selection, used to screen regulatory genes.
 XX
 KW Cancer; chemotherapy; gene therapy; neurological disorder;
 KW Alzheimer's disease; Huntington's disease; Parkinson's disease;
 KW cardiovascular disorder; myocardial hypertrophy; atherosclerosis;
 KW myocardial infarction; bone disorder; muscle disorder; osteoarthritis;
 KW osteoporosis; blood disorder; systematic lupus; primer design; ss.
 XX
 CS Synthetic.
 XX
 EN W0200175162-A2.
 XX
 PD 11-OCT-2001.
 XX
 PF 29-MAR-2001; 2001WO-US010096.
 XX
 PR 31-MAR-2000; 2000US-0193888P.
 XX
 PA (UYLO-) UNIV LOUISVILLE RES FOUND INC.
 XX
 PI Wang E;
 XX
 DR WPI; 2001-662978/76.
 XX
 PT Array of nucleic acids selective for genes comprising common regulatory
 PT sequence, useful for identifying drug targets or disease markers and in
 PT drug screening.
 XX
 PS Example 1; Page 20; 34pp; English.

The invention describes a novel array of nucleic acids each binding selectively to a gene comprising a regulatory sequence and a promoter, that require the presence of the nucleic acid for gene expression. The method is used to identify drug targets or disease-specific markers, and to determine the response of diseases to drugs or other treatments, e.g. to define risk factors; for diagnosis and prognosis of stages of cancer; to monitor chemotherapy or gene therapy; and for drug discovery (e.g. for neurological (e.g. Alzheimer's disease, Parkinson's disease and Huntington's disease), cardiovascular (e.g. myocardial hypertrophy, atherosclerosis and myocardial infarction), bone and muscle (e.g. osteoarthritis and osteoporosis), blood or circulatory diseases (e.g. Systematic lupus) or cancer). The method provides rapid and sensitive analysis of genetic information associated with a common regulatory sequence, associated with a particular disease or state, and requires only very small amounts of material. Grouping genes from their regulators, rather than function, allows immediate association of specific pathways and quantification of changes in gene expression allows a gene hierarchy to be established. Only minor genes are selected for the microarray, this prevents their expression being obscured by that of strongly expressed genes (adjacent to them on the array). This sequence is the target feature of a regulatory gene identified by using database search methods and alignments based on the synthetic core element (see AAS15889) described in the method of the invention

Sequence 16 BP; 7 A; 3 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 16;
 Best Local Similarity 91.7%; Pred. No. 1e+03;
 Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 900 CCTGTCATTTT 911
 | | | | | | | | | |
 DB 14 CCTGGTCACTTT 3

RESULT 605
 ABK15234/c
 ID ABK15234 standard; DNA; 16 BP.
 XX
 AC ABK15234;
 XX

DT 08-MAY-2002 (first entry)
 XX
 DE Human GHRHR promoter core element sequence.
 XX

KW Human; ds; promoter; core element; GHRHR; neurological disorder;
 KW cardiovascular disorder; bone disorder; muscle disorder; blood disorder;
 KW circulation disorder; cancer; Alzheimer's disease; Parkinson's disease;
 KW Huntington's disease; atherosclerosis; myocardial infarction;
 KW osteoarthritis; osteoporosis; autoimmune disorder; brain tumour;
 KW chronic lymphocytic leukaemia; acute lymphocytic leukaemia.

XX Homo sapiens.
 OS
 XX US2002009736-A1.
 XX
 PD 24-JAN-2002.
 XX
 PF 29-MAR-2001; 2001US-00820531.
 XX
 PR 31-MAR-2000; 2000US-0193888P.
 XX
 PA (WANG/) WANG E.
 XX

PI Wang E;
 XX
 DR WPI; 2002-171142/22.
 XX

PT Microarrays for screening regulatory gene associated with neurological
 PT disorders, cardiovascular disorders, bone and muscle disorders, blood or
 PT circulation related disorders, and cancer.

PS Example 1; Page 7; 14pp; English.

The invention relates to microarrays and primers useful for detecting and analysing expression of nucleic acids associated with disorders and diseases, e.g. neurological disorders, cardiovascular disorders, bone and muscle disorders, blood or circulation related disorders, and cancer e.g. an array comprising (at distinct locations on a substrate) nucleic acid molecules each selectively binding to a gene comprising a regulatory sequence and a promoter (each promoter interacts with a second nucleic acid molecule binding to the regulatory sequence or whose expression is dependent on this binding). The methods, microarrays and primers are used to analysed the expression of gene involved in disorders and disease states listed above especially Alzheimer's disease, Parkinson's disease, Huntington's disease, myocardial hypertrophy, atherosclerosis, myocardial infarction, osteoarthritis, osteoporosis, and autoimmune disorders, breast cancer, prostatic hypertrophy, prostatic cancer, colon cancer, chronic lymphocytic leukaemia, acute lymphocytic leukaemia, brain tumour, pancreatic cancer, and hepatomas. The current technology of gene screening using large numbers of genes grouped by functional capability generates a tremendous amount of data, which produces subsequent problems in data evaluation. For example, when a known chip bearing the coding regions of 10000 genes is screened, it provides perhaps a few hundred genes whose expressions may display significant gain or loss for a given physiological state. Sorting out these few hundred genes into a hierarchy of respective importance in terms of upstream or downstream function is a very tedious task, requiring a lot of manpower and computing time. Using

cassettes of gene microarrays manufactured according to regulatory modality avoids this problem, i.e., positive or negative changes of gene expression on a given five or six DNA microarrays provides immediate assessment of which pathways are involved, since these microarrays are designed according to regulatory pathways. Furthermore, the quantitative levels of gain or loss of gene expression for a given gene provide self-evident implications of the hierarchic order of genes, with regard to the separation of a master gene switch versus pedestrian gene changes. Due to the genes being grouped into subsets according to regulatory modality for gene expression provides a platform for gene microarrays of similar abundance of gene expression. The present sequence is a core element sequence from the promoter of human growth hormone releasing hormone receptor (GHRHR) used in an experiment to demonstrate the method of the invention.

Sequence 16 BP; 7 A; 3 C; 4 G; 2 T; 0 U; 0 Other;
Query Match 14.2%; Score 10.4; DB 1; Length 16;
Best Local Similarity 91.7%; Pred. No. 1e+03;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

900 CTGGTCACTTT 911
|||||
14 CTGGTCACTTT 3

RESULT 606
3P33714/C
ABT33714 standard; DNA; 16 BP.

ABT33714;
29-MAY-2003 (first entry)

Ribozyme substrate binding sequence SEQ ID No 65.
Cytostatic; gene therapy; apoptosis; cancer growth inhibition;
drug screening; ss.
Unidentified.

WO200292840-A2.
21-NOV-2002.
14-MAY-2002; 2002WO-US015198.
14-MAY-2001; 2001US-0290927P.
(IMMU-) IMMUSOL INC.

Tritz R, Keilly B, Habita C, Robbins J, Barber J;
WPI; 2003-129308/12.

New isolated nucleic acid molecule useful for regulating apoptosis induction in cells, for inhibiting the growth of cancer in subjects, and for drug screening.

Example 3; Page 41; 153pp; English.

The invention relates to a novel isolated molecule comprising bases 2-8 or 13-16 of 2 16 base pair sequences, or comprising a 1731 base pair sequence, all given in the specification or at least 95 % identity with the 1731 bp sequence. The nucleic acid molecule is useful in regulating apoptosis in cells and in drug screening. The method is useful in facilitating the induction of apoptosis in cells, in identifying an agent that can facilitate the induction of apoptosis in cells, and in inhibiting the growth of a cancer. This polynucleotide sequence represents a ribozyme binding substrate sequence relating to the invention

Sequence 16 BP; 8 A; 0 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 14.2%; Score 10.4; DB 1; Length 16;
Best Local Similarity 91.7%; Pred. No. 1e+03;
Matches 11; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 926 TTTTATCCTCC 937
|||||
Db 14 TTTTCTCCTCC 3

RESULT 607
AAT55663
ID AAT55663 standard; RNA; 15 BP.

AC AAT55663;
XX 25-MAR-2003 (revised)
DT 21-MAR-1997 (first entry)

Human TNF-alpha hammerhead ribozyme target sequence (nt position 193).
XX
KW Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW gene expression; downregulation; interleukin-5; IL-5; ICMW-1;
KW intercellular adhesion molecule; rel A; tumour necrosis factor;
KW TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
KW translocation; chronic myelogenous leukaemia; CML; cancer;
KW Philadelphia chromosome; inflammation; autoimmune disease;
KW atherosclerosis; myocardial infarction; stroke; restenosis;
KW transplant rejection; rheumatoid arthritis; psoriasis;
KW myocardial ischaemia; Kawasaki disease; septic shock; HIV;
KW human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
ss.

XX Homo sapiens.
OS
XX
PN MO9523225-A2.

XX
PD 31-AUG-1995.

XX
PF 23-FEB-1995; 95WO-IB000156.

XX 23-FEB-1994; 94US-00201109.
PR 29-MAR-1994; 94US-00218934.
PR 04-APR-1994; 94US-00222795.
PR 07-APR-1994; 94US-00224483.
PR 15-APR-1994; 94US-00227958.
PR 15-APR-1994; 94US-00228041.
PR 18-MAY-1994; 94US-00245736.
PR 06-JUL-1994; 94US-00271280.
PR 15-AUG-1994; 94US-00291932.
PR 16-AUG-1994; 94US-00291433.
PR 17-AUG-1994; 94US-00292620.
PR 19-AUG-1994; 94US-00293520.
PR 02-SEP-1994; 94US-00300000.
PR 08-SEP-1994; 94US-00303039.
PR 23-SEP-1994; 94US-00311486.
PR 23-SEP-1994; 94US-00311749.
PR 28-SEP-1994; 94US-00314397.
PR 03-OCT-1994; 94US-00316771.
PR 07-OCT-1994; 94US-00319492.
PR 11-OCT-1994; 94US-00321993.
PR 04-NOV-1994; 94US-00334847.
PR 10-NOV-1994; 94US-00337608.
PR 28-NOV-1994; 94US-00345516.
PR 16-DEC-1994; 94US-00357577.
PR 23-DEC-1994; 94US-00363233.
PR 30-JAN-1995; 95US-00380734.

XX (RIBO-) RIBOZYME PHARM INC.

XX
PI Stinchcomb DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW;
PI Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;

```

FI Tracz D, Usman N, Wincott FE, Woolf T;
XX WPI; 1995-351090/45.
XX Ribozymes having modified bases and methods for producing them - for use
PT in inhibiting disease related genes.
XX Claim 2; Page 241; 407pp; English.
XX The present sequence represents a preferred target sequence for an
CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves TNF-alpha mRNA at
CC the nucleotide base position indicated in the DE line. Regions of the
CC mRNA that do not form secondary folding structures and that contain
CC potential hammerhead and hairpin ribozyme cleavage sites were identified
CC by computer analysis. Ribozymes directed against these mRNA sequences
CC were designed and synthesised with modifications that improve their
CC nuclease resistance. The ribozymes are designed to cleave the target
CC sequences and thereby inhibit TNF-alpha expression, making them
CC potentially useful for treating rheumatoid arthritis, septic shock and
CC other inflammatory disorders including psoriasis, as well as for
CC treatment of AIDS. (Updated on 25-MAR-2003 to correct PI field.)
XX
XX Sequence 15 BP; 0 A; 8 C; 1 G; 0 T; 6 U; 0 Other;
SQ
Query Match 14.0%; Score 10.2; DB 1; Length 15;
Best Local Similarity 46.7%; Pred. No. 1.1e+03;
Matches 7; Conservative 5; Mismatches 3; Indels 0; Gaps 0;

QY 923 GCCYTTTATCCCTCC 937
DB |||: : : ||| : ||
1 GCCUCUCUCUCUCC 15

RESULT 608
AAT56959/c
ID AAT56959 standard; RNA; 15 BP.
XX
AC AAT56959;
XX
DT 27-AUG-2003 (revised)
DT 25-MAR-2003 (revised)
DT 24-APR-1997 (first entry)
XX
DE RSV 1C hammerhead ribozyme target sequence (nt. position 165).
XX
KW Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
KW TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
KW Philadelphia chromosome; chronic myelogenous leukaemia; CML; cancer;
KW atherosclerosis; myocardial infarction; stroke; restenosis;
KW transplant rejection; rheumatoid arthritis; psoriasis;
KW myocardial ischaemia; Kawasaki disease; septic shock; HIV;
KW human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
XX ss.
XX
OS Respiratory syncytial virus.
XX
XX W09523225-A2.
XX
XX 31-AUG-1995.
XX
XX 23-FEB-1995; 95WO-IB000156.
XX
XX 23-FEB-1994; 94US-00201109.
XX 29-MAR-1994; 94US-00218934.
XX 04-APR-1994; 94US-00222795.
XX 07-APR-1994; 94US-00224483.
XX 15-APR-1994; 94US-00227958.
XX 15-APR-1994; 94US-00228041.
XX 18-MAY-1994; 94US-00245736.
XX 06-JUL-1994; 94US-00271280.

```

```

PR 15-AUG-1994; 94US-00291932.
PR 16-AUG-1994; 94US-00291433.
PR 17-AUG-1994; 94US-00292620.
PR 19-AUG-1994; 94US-00293520.
PR 02-SEP-1994; 94US-00300000.
PR 08-SEP-1994; 94US-00303039.
PR 23-SEP-1994; 94US-00311486.
PR 23-SEP-1994; 94US-00311749.
PR 28-SEP-1994; 94US-00314397.
PR 03-OCT-1994; 94US-00316771.
PR 07-OCT-1994; 94US-00319492.
PR 11-OCT-1994; 94US-00321993.
PR 04-NOV-1994; 94US-00334847.
PR 10-NOV-1994; 94US-00337608.
PR 28-NOV-1994; 94US-00345516.
PR 16-DEC-1994; 94US-00357577.
PR 23-DEC-1994; 94US-00363233.
PR 30-JAN-1995; 95US-00380734.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA
PI Stinchcomb DT, Chowrira B, Drenzo A, Draper KG, Dudycz LW;
PI Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
PI Tracz D, Usman N, Wincott FE, Woolf T;
XX WPI; 1995-351090/45.
DR
XX Ribozymes having modified bases and methods for producing them - for use
PT in inhibiting disease related genes.
XX Claim 2; Page 269; 407pp; English.
XX
CC The present sequence represents a preferred target sequence for an
CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves mRNA coding for a
CC protein of respiratory syncytial virus (RSV) at the nucleotide base
CC position indicated in the DE line. Regions of the mRNA that do not form
CC secondary folding structures and that contain potential hammerhead and
CC hairpin ribozyme cleavage sites were identified by computer analysis.
CC Ribozymes directed against these mRNA sequences were designed and
CC synthesised with modifications that improve their nuclease resistance.
CC The ribozymes cleave the target sequences and can be used for treatment
CC and diagnosis of RSV infection. (Updated on 25-MAR-2003 to correct PI
CC field.) (Updated on 27-AUG-2003 to correct OS field.)
XX
XX Sequence 15 BP; 6 A; 3 C; 1 G; 0 T; 5 U; 0 Other;
SQ
Query Match 14.0%; Score 10.2; DB 1; Length 15;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 942 CATTGGTTTAATGTA 956
DB ||| ||| ||| ||| |||
15 CGTTAGTTTAATGTA 1

RESULT 609
AAT56971/c
ID AAT56971 standard; RNA; 15 BP.
XX
AC AAT56971;
XX
XX 27-AUG-2003 (revised)
XX 25-MAR-2003 (revised)
XX 24-APR-1997 (first entry)
XX
XX RSV 1C hammerhead ribozyme target sequence (nt. position 196).
XX
XX Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
XX gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
XX intercellular adhesion molecule; rel A; tumour necrosis factor;
XX TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
XX translocation; chronic myelogenous leukaemia; CML; cancer;

```

Philadelphia chromosome; inflammation; autoimmune disease; atherosclerosis; myocardial infarction; stroke; restenosis; transplant rejection; rheumatoid arthritis; psoriasis; myocardial ischaemia; Kawasaki disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syndrome; AIDS; ss.

Respiratory syncytial virus.

WO9523225-A2.

31-AUG-1995.

23-FEB-1995; 95WO-IB000156.

23-FEB-1994; 94US-00201109.

29-MAR-1994; 94US-00218934.

04-APR-1994; 94US-00222795.

07-APR-1994; 94US-00224483.

15-APR-1994; 94US-00227958.

15-APR-1994; 94US-00228041.

18-MAY-1994; 94US-00245736.

06-JUL-1994; 94US-00271280.

15-AUG-1994; 94US-00291932.

16-AUG-1994; 94US-00291433.

17-AUG-1994; 94US-00292620.

19-AUG-1994; 94US-00293520.

02-SEP-1994; 94US-00300000.

08-SEP-1994; 94US-00303039.

23-SEP-1994; 94US-00311486.

23-SEP-1994; 94US-00311749.

28-SEP-1994; 94US-00314397.

03-OCT-1994; 94US-00316771.

07-OCT-1994; 94US-00319492.

11-OCT-1994; 94US-00321993.

04-NOV-1994; 94US-00334847.

10-NOV-1994; 94US-00337608.

28-NOV-1994; 94US-00345516.

16-DEC-1994; 94US-00357577.

23-DEC-1994; 94US-00363233.

30-JAN-1995; 95US-00380734.

(RIBO-) RIBOZYME PHARM INC.

Stinchcomb DT, Chowira B, Dizenzo A, Draper KG, Dudycz LW;

Grimm S, Karpeisky A, Kisch K, Matulic-Adamic J, McSwiggen JA;

Modak A, Pavco P, Beigelman L, Sullivan SM, Sweedler D, Thompson JD;

Tracz D, Usman N, Wincott FE, Woolf T;

WPI; 1995-351090/45.

Ribozymes having modified bases and methods for producing them - for use

in inhibiting disease related genes.

Claim 2; Page 269; 407pp; English.

The present sequence represents a preferred target sequence for an

enzymatic nucleic acid (i.e. a ribozyme) which cleaves mRNA coding for a

protein of respiratory syncytial virus (RSV) at the nucleotide base

position indicated in the DE line. Regions of the mRNA that do not form

secondary folding structures and that contain potential hammerhead and

hairpin ribozyme cleavage sites were identified by computer analysis.

Ribozymes directed against these mRNA sequences were designed and

synthesised with modifications that improve their nuclease resistance.

The ribozymes cleave the target sequences and can be used for treatment

and diagnosis of RSV infection. (Updated on 25-MAR-2003 to correct PI

field.) (Updated on 27-AUG-2003 to correct OS field.)

Sequence 15 BP; 8 A; 3 C; 1 G; 0 T; 3 U; 0 Other;

Query Match 14.0%; Score 10.2; DB 1; Length 15;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 944 TTGGTTTAAATGATC 958

Db 15 TTGATGATGATC 1

RESULT 610

AA64778

ID AAX64778 standard; RNA; 15 BP.

XX AAX64778;

XX 20-JUL-1999 (first entry)

XX Human B7-1 hammerhead ribozyme target SEQ ID NO:1410.

XX Arthritic condition; graft tolerance; immune response; target; cleavage;
XX hammerhead ribozyme; hairpin ribozyme; human; rabbit; mouse; collagenase;
XX stromelysin; synovial membrane; joint; arthritis; osteoarthritis;
XX rheumatoid arthritis; autoimmune disease; allergy; inflammation;
XX diagnosis; ss.

OS Homo sapiens.

XX WO9618736-A2.

XX 20-JUN-1996.

XX 22-NOV-1995; 95WO-US015516.

XX 13-DEC-1994; 94US-00354920.

XX 23-DEC-1994; 94US-00363253.

XX 23-DEC-1994; 94US-00363254.

XX 17-FEB-1995; 95US-00390850.

XX 20-APR-1995; 95US-00426124.

XX 02-MAY-1995; 95US-00432874.

XX 04-MAY-1995; 95US-00434509.

XX 07-JUL-1995; 95US-0000951P.

XX 07-JUL-1995; 95US-0000974P.

XX 07-AUG-1995; 95US-00512861.

XX 05-OCT-1995; 95US-00541365.

XX (RIBO-) RIBOZYME PHARM INC.

XX Stinchcomb DT, Jarvis T, Draper K, Pavco P;

XX McSwiggen L, Gustafson J, Usman N, Wincott F, Matulic-Adamic J;

XX Karpeisky A, Thompson JD, Modak A, Burgin A;

XX WPI; 1996-300653/30.

XX Enzymatic nucleic acid molecules having a hammer-head motif - used for

the treatment of arthritis, induction of graft tolerance or treatment of

auto-immune diseases.

Claim 10; Page 168; 307pp; English.

The present invention describes a novel enzymatic nucleic acid (ENA)

having a hammerhead motif (HM) comprising: (i) at least 5 ribose residues

; (ii) a 2'-C-allyl modification at position 4 of the ENA; (iii) at least

ten 2'-O-methyl modifications; and (iv) a 3'-end modification. The ENA's

can inhibit collagenase and stromelysin production in the synovial

membrane of joints for the treatment or prevention of arthritis,

particularly osteoarthritis or rheumatoid arthritis. The ENA's can also
be used to treat antigen presenting cells of a donor to induce tolerance
in a recipient to an alloantigen of a donor. They can also be used for
enhancing graft tolerance or for treating autoimmune disease, and for
treating allergies and other inflammatory conditions. The ENA's can also
be used in diagnosis. Ribozyme therapy impacts on the expression of
stromelysin without introducing the non-specific effects upon gene
expression which accompany treatment with retinoids and dexamethasone.
The concentration of ribozyme required to affect a therapeutic treatment
is lower than that required of antisense molecules, and is highly
specific. The present sequence is used in the exemplification of the

```

CC present invention
XX
SQ Sequence 15 BP; 4 A; 2 C; 2 G; 0 T; 7 U; 0 Other;

Query Match      14.0%; Score 10.2; DB 1; Length 15;
Best Local Similarity 40.0%; Pred. No. 1.1e+03;
Matches 6; Conservative 6; Mismatches 3; Indels 0; Gaps 0;

QY 944 TTGGTTTAAATGATC 958
DB 1 UUUGCUAAUGUAC 15

RESULT 611
ID AAT46989/c
XX AAT46989 standard; DNA; 15 BP.
AC AAT46989;
XX
XX 01-DEC-1997 (first entry)
XX
XX HLA sequence 28.
XX
XX apparatus; enhanced detection; biological reaction; biochip;
XX fluid system; diagnosis; analysis; multistep; multiplex reaction;
XX synthesis; biopolymer; automated DNA analysis system; self-addressable;
XX self-assembling; electronic; target probe; denaturation; APEX chip; ss.
XX
XX Synthetic.
XX
XX WO9712030-A1.
XX
XX 03-APR-1997.
XX
XX 06-SEP-1996; 96WO-US014353.
XX
XX 27-SEP-1995; 95US-00534454.
XX
XX (NANO-) NANOGEN INC.
XX
XX Heller MJ, Oconnell JP, Juncosa RD, Sosnowski RG, Jackson TR;
XX WPI; 1997-212892/19.
XX
XX Self-addressable and self-assembling system for biological reactions -
XX comprises array of specific binding regions on biochip, also new
XX fluorescence detection system and stringency control device.
XX
XX Disclosure; Fig 10; 69pp; English.
XX
XX The invention concerns an apparatus for enhanced detection of a
XX biological reaction between a sample and an active area of a biochip,
XX comprises the biochip and a fluidic system designed to pass the sample
XX over the active area. The apparatus can be used for diagnosis, analysis
XX and multistep/multiplex reactions (including synthesis of biopolymers),
XX especially those involving nucleic acid hybridisation (but also antigen-
XX antibody reactions). Use of a flow system improves diagnostic efficiency,
XX allows more complete sampling and the detection device provides imaging
XX of very small volumes. Together these elements provide a highly automated
XX DNA analysis system from self-addressable and self-assembling electronic
XX components. AAT46987-91 are HLA sequences used in an experiment using the
XX apparatus of the invention
XX
SQ Sequence 15 BP; 4 A; 2 C; 2 G; 7 T; 0 U; 0 Other;

Query Match      14.0%; Score 10.2; DB 1; Length 15;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 929 TATCCCTCTCTTCA 943
DB 15 TAGCCCTCTCTGCA 1

CC present invention
XX
SQ Sequence 15 BP; 4 A; 2 C; 2 G; 0 T; 7 U; 0 Other;

Query Match      14.0%; Score 10.2; DB 1; Length 15;
Best Local Similarity 40.0%; Pred. No. 1.1e+03;
Matches 6; Conservative 6; Mismatches 3; Indels 0; Gaps 0;

QY 944 TTGGTTTAAATGATC 958
DB 1 UUUGCUAAUGUAC 15

RESULT 611
ID AAT46989/c
XX AAT46989 standard; DNA; 15 BP.
AC AAT46989;
XX
XX 01-DEC-1997 (first entry)
XX
XX HLA sequence 28.
XX
XX apparatus; enhanced detection; biological reaction; biochip;
XX fluid system; diagnosis; analysis; multistep; multiplex reaction;
XX synthesis; biopolymer; automated DNA analysis system; self-addressable;
XX self-assembling; electronic; target probe; denaturation; APEX chip; ss.
XX
XX Synthetic.
XX
XX WO9712030-A1.
XX
XX 03-APR-1997.
XX
XX 06-SEP-1996; 96WO-US014353.
XX
XX 27-SEP-1995; 95US-00534454.
XX
XX (NANO-) NANOGEN INC.
XX
XX Heller MJ, Oconnell JP, Juncosa RD, Sosnowski RG, Jackson TR;
XX WPI; 1997-212892/19.
XX
XX Self-addressable and self-assembling system for biological reactions -
XX comprises array of specific binding regions on biochip, also new
XX fluorescence detection system and stringency control device.
XX
XX Disclosure; Fig 10; 69pp; English.
XX
XX The invention concerns an apparatus for enhanced detection of a
XX biological reaction between a sample and an active area of a biochip,
XX comprises the biochip and a fluidic system designed to pass the sample
XX over the active area. The apparatus can be used for diagnosis, analysis
XX and multistep/multiplex reactions (including synthesis of biopolymers),
XX especially those involving nucleic acid hybridisation (but also antigen-
XX antibody reactions). Use of a flow system improves diagnostic efficiency,
XX allows more complete sampling and the detection device provides imaging
XX of very small volumes. Together these elements provide a highly automated
XX DNA analysis system from self-addressable and self-assembling electronic
XX components. AAT46987-91 are HLA sequences used in an experiment using the
XX apparatus of the invention
XX
SQ Sequence 15 BP; 4 A; 2 C; 2 G; 7 T; 0 U; 0 Other;

Query Match      14.0%; Score 10.2; DB 1; Length 15;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 929 TATCCCTCTCTTCA 943
DB 15 TAGCCCTCTCTGCA 1

```

```

RESULT 612
AAT84340/c
ID AAT84340 standard; DNA; 15 BP.
XX
XX AAT84340;
AC AAT84340;
XX
XX 11-NOV-1997 (first entry)
XX
XX Mannose binding protein gene codon 57 mutant PCR primer.
XX
XX Mannose binding protein; MBP gene; human; infection; depression;
XX chronic fatigue syndrome; irritable bowel syndrome; HBV;
XX hepatitis B virus; Gulf War syndrome; polymerase chain reaction; PCR;
XX primer; dot-blot hybridisation; probe; ss.
XX
XX Synthetic.
XX
XX WO9705279-A1.
XX
XX 13-FEB-1997.
XX
XX 25-JUL-1996; 96WO-GB001819.
XX
XX 27-JUL-1995; 95GB-00015393.
XX
XX 13-OCT-1995; 95GB-00021025.
XX
XX 09-JUL-1996; 96GB-00014414.
XX
XX (UNLO) IMPERIAL COLLEGE SCI TECHNOLOGY & MED.
XX
XX Thomas HC, Summerfield JA, Main J;
XX WPI; 1997-145713/13.
XX
XX Predicting susceptibility to, and outcome of, infection - comprises
XX determining presence of mutation in the mannose binding protein gene,
XX esp. in codon 52 of exon 1.
XX
XX Claim 21; Page 32; 42pp; English.
XX
XX This primer sequence is based on a human mannose binding protein (MBP)
XX gene exon 1 codon 57 mutant sequence. Primers (AAT84335-40) based on wild
XX -type or mutant exon 1 codon 52, codon 54 or codon 57 sequences can be
XX utilised in claimed kit and sequence-specific oligonucleotide (SSO) dot-
XX blot hybridisation methods for establishing the MBP genotype of a
XX subject. A mutation in codon 52 of exon 1 is indicative of susceptibility
XX to chronic viral infection, chronic fatigue syndrome, depressive disease,
XX irritable bowel syndrome, Gulf War syndrome and/or hepatitis B virus
XX infection. A mutation in one or more of codons 52, 54 or 57 of exon 1 of
XX the MBP gene of a child or foetus is indicative of susceptibility to
XX recurrent childhood infection and premature birth
XX
XX Sequence 15 BP; 9 A; 2 C; 4 G; 0 T; 0 U; 0 Other;
XX
XX Query Match      14.0%; Score 10.2; DB 1; Length 15;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
QY 934 CTCCTCTCTCTTGGT 948
DB 15 CTTTCTCTCTTGGT 1

RESULT 613
AAX14658
ID AAX14658 standard; DNA; 15 BP.
XX
XX AAX14658;
AC AAX14658;
XX
XX 24-MAR-1999 (first entry)
XX
XX Triple helix forming nucleotides 13280-13294 of the dystrophin gene.
XX

```

Triple-helix forming region; Triplex formation; DNA detection; identification; bacteria; oncogene; virus; ds.

Homo sapiens.

US5861244-A.

19-JAN-1999.

22-DEC-1993; 93US-00173489.

29-OCT-1992; 92US-00968436.

(PROF-) PROFILE DIAGNOSTIC SCI INC.

Hepburn AG, Wang C;

WPI; 1999-130384/11.

Assay of genetic sequences based on triplex formation from double stranded analyte - and hybrid of anchor and reporter sequences, with reporter released if triplex formation occurs, used e.g. to identify bacteria.

Disclosure; Col 15-16; 168pp; English.

The present sequence represents a potential triple-helix forming region. It can be used to demonstrate the assay of the invention. The assay comprises adding a sample containing double-stranded DNA test sequences, e.g. containing the present sequence, to an aqueous medium containing at least one complex of anchor DNA, attached to a solid support, and reporter DNA, where either a part of the anchor DNA or reporter DNA is designed to form a triple-strand structure with part of the test sequence. Triplex formation results in displacement of the reporter DNA which is detected as an indication of the presence of the DNA test sequence. The method is used to detect DNA sequences, particularly for identification of bacteria (by detecting genes for ribosomal RNA) in clinical samples, but also detection of oncogenes and Hepatitis B virus

Sequence 15 BP; 0 A; 3 C; 0 G; 12 T; 0 U; 0 Other;

Query Match 14.0%; Score 10.2; DB 1; Length 15;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Y 908 TTTTCTTTGGCTTT 922

||||| |||||
1 TTTTCTTTTCTTT 15

RESULT 614

AA29142/C

AAA29142 standard; DNA; 15 BP.

AAA29142;

12-SEP-2000 (first entry)

Ribosome binding site A for use in toggle switch constructs.

Toggle switch; P-L promoter; cits gene; lacI; Escherichia coli; P-trc;

ribosome binding site; promoter; adjustable-threshold switch; model;

multi-state oscillator; gene regulation; cell cycle; cancer; cytostatic;

gene therapy; ss.

Synthetic.

WO200032748-A1.

08-JUN-2000.

01-DEC-1999; 99WO-US028592.

02-DEC-1998; 98US-0110616P.

(UYBO-) UNIV BOSTON.

Gardner TS, Collins JJ;

WPI; 2000-412301/35.

Altering gene transcription for treating disorders such as cancer, by exposing host cell transfected with composition having two constructs operably linked to promoter, to two different agents inducing transcription.

Example 2; Fig 22; 116pp; English.

AAA29142-49 are oligonucleotides comprising ribosome binding sites used in construction of a "toggle switch". The toggle switch constructs switch expression of a gene of interest between stable "on" or "off" states in response to a transiently applied agent. Other genetic "applets", i.e. a network of interacting genes, are provided. The genetic applets are exemplified by toggle switch constructs, adjustable-threshold switch constructs (for expressing a gene of interest in response to the sustained application of an agent at a concentration above or below a desired threshold concentration) and multi-state oscillator constructs (where expression of a gene of interest is periodically altered in the absence of administration of agents which are extraneous to the construct). The applets provide a model for gene networks which have applications in clinical therapy, biomedical research and biotechnology. The toggle switch constructs contain two mutually inhibitory genes. Promoter 1, efficiently transcribes gene 1 unless inhibited by the repressor protein encoded by gene 2. Promoter 2 efficiently transcribes gene 2 unless inhibited by the repressor protein encoded by gene 1. A host cell can be transfected with the two constructs and exposed, in any order, to two agents, one inducing transcription of the gene of interest, the other repressing it. In particular, the constructs are useful for controlling the cell cycle, for treating cancer, and for developing a predictive theory of gene expression

Sequence 15 BP; 9 A; 0 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 14.0%; Score 10.2; DB 1; Length 15;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 924 CCTTTTATCCCTCCT 938

||||| |||||
15 CATTTTTCCTCCT 1

RESULT 615

AAA48271/C

AAA48271 standard; DNA; 15 BP.

AAA48271;

28-SEP-2000 (first entry)

E. coli ompA gene fragment, comprising ribosome binding site and 5'UTR.

Antigen presentation; vaccine; infectious disease; allergy; cancer;

molecular scaffold; immune response; farm animal; organiser; hGH;

immunostimulatory; cytostatic; anti-allergy; human growth hormone;

POS leucine zipper; OmpA; outer membrane protein; ss.

Escherichia coli.

WO200032227-A2.

08-JUN-2000.

30-NOV-1999; 99WO-IB001925.

30-NOV-1998; 98US-0110414P.


```

PR 08-JUL-1999; 99US-0142788P.
XX
XX PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
XX
XX PI Renner WA, Hennecke F, Nieba L, Bachmann M;
XX
XX WPI; 2000-412159/35.
XX
XX Compositon for use as vaccine against infectious diseases and in
PT treatment of cancer and allergies comprises non-naturally occurring
PT molecular scaffold and antigen or antigenic determinant.
XX
XX Example 6; Page 47; 102pp; English.
XX
XX A new method for developing vaccines has been identified, in which a non-
CC naturally occurring molecular scaffold, having a core particle and a
CC covalently attached organiser, is attached to an antigen or antigenic
CC determinant. The scaffold and antigen or antigenic determinant interact
CC to form an ordered and repetitive antigen array. The composition is
CC useful as a vaccine against infectious diseases, to induce immune
CC responses in farm animals and also in the treatment of cancer and
CC allergies. The human Growth Hormone, hGH, protein was used as the
CC scaffold in the present invention, and was fused to E. coli outer
CC membrane protein. The FOS signal sequence which is a FOS leucine zipper
CC protein domain. The FOS domain formed the antigen attachment site. The
CC present sequence is E. coli ompA gene fragment, comprising the ribosome
CC binding site and 5'UTR. This sequence was used in the construction of the
CC pAV vector series. The pAV vectors were used to express the FOS fusion
CC proteins in E. coli
XX
XX SQ Sequence 15 BP; 8 A; 1 C; 5 G; 1 T; 0 U; 0 Other;
Query Match 14.0%; Score 10.2; DB 1; Length 15;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 924 CCTTTATCCCTCCT 938
DQ 15 CGTTTTTACCTCCT 1
RESULT 616
AAC65672
ID AAC65672 standard; DNA; 15 BP.
XX
XX AAC65672;
XX
XX 16-FEB-2001 (first entry)
XX
XX Human c-myc CMAS primer SEQ ID NO 2.
XX
XX Primer; antisense; CMAS; covalently closed multiple antisense;
XX secondary structure; cytosstatic; immunosuppressive; ss.
XX
XX Homo sapiens.
XX
XX WO2000061595-A1.
XX
XX 19-OCT-2000.
XX
XX 04-APR-2000; 2000WO-KR000305.
XX
XX 08-APR-1999; 99KR-00012297.
XX
XX (PARK/) PARK J.
XX
XX Park J;
XX
XX WPI; 2000-679458/66.
XX
XX Antisense oligonucleotides comprising antisense sequences to mRNA regions
XX with reduced secondary structure to improve its target sequence
XX specificity, and closed type construction to improve stability against

```

```

PT nucleases.
XX
XX Claim 5; Page 63; 66pp; English.
XX
XX This invention describes a novel antisense oligonucleotide (oligo) (I)
CC which has improved target sequence specificity by containing one or more
CC antisense sequence(s) to mRNA regions which reduced secondary structure,
CC and improved stability against nuclease activity by having closed type
CC construction. The products of the invention have cytostatic and
CC immunosuppressive activity. (I) is stable to nuclease activity, shows a
CC significant specificity to gene expression and has better antisense
CC effect. One micro g each of non-specific control-phosphodiester oligo
CC (liner 60 mer) and the CMAS-oligo were incubated with either raw human
CC serum, FBS (fetal bovine serum) and calf serum or exonuclease III. AS-
CC oligos were then extracted. As a result of CMAS-oligo, linear 60 mer
CC oligo was completely digested after 24 hr incubation in the presence of
CC serum. The closed-type CMAS-oligo was remained mostly intact after 24
CC hour incubation with raw human serum, FBS, and calf serum, exhibiting
CC significantly improved stability than the linear one against nucleases
XX
XX SQ Sequence 15 BP; 1 A; 3 C; 2 G; 9 T; 0 U; 0 Other;
Query Match 14.0%; Score 10.2; DB 1; Length 15;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 902 TGGTCATTTCTTTG 916
DQ 1 TGATCTTCTCTTTG 15
RESULT 617
AAF48960
ID AAF48960 standard; DNA; 15 BP.
XX
XX AAF48960;
XX
XX 30-MAR-2001 (first entry)
XX
XX IGFBP3 oligonucleotide #2380.
XX
XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
XX cytosstatic; dermatological; cardiant; virucide; ophthalmological; keloid;
XX skin disorder; insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
XX IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
XX growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
XX keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
XX hyperneovascular condition; hyperplasia; kidney disease;
XX
XX Homo sapiens.
XX
XX WO2000078341-A1.
XX
XX 28-DEC-2000.
XX
XX 21-JUN-2000; 2000WO-AU000693.
XX
XX 21-JUN-1999; 99US-0140345P.
XX
XX (MURD-) MURDOCH CHILDRENS RES INST.
XX
XX Wraight CJ, Werther GA, Edmondson SR;
XX WPI; 2001-041421/05.
XX
XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering
XX UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
XX inhibits or reduces growth factor mediated cell proliferation and/or
XX inflammation.
XX
XX Example 7; Page 59; 201pp; English.
XX

```

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia

Sequence 15 BP; 1 A; 1 C; 0 G; 13 T; 0 U; 0 Other;
 Query Match 14.0%; Score 10.2; DB 1; Length 15;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

908 TTTCTTGGCTCTT 922
 |||||
 1 TTTCTTATTTT 15

RESULT 618
 AAF52585/c

1 AAF52585 standard; DNA; 15 BP.

AAF52585;

30-MAR-2001 (first entry)

IGF-I oligonucleotide #3545.

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
 cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
 skin disorder; insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
 IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
 growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
 keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
 hyperneovascular condition; hyperplasia; kidney disease;
 neovascular condition of the retina; ss.

Homo sapiens.

WO200078341-A1.

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693.

21-JUN-1999; 99US-0140345P.

(MURD-) MURDOCH CHILDRENS RES INST.

Wright CJ, Werther GA, Edmondson SR;

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 8; Page 84; 201pp; English.

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of

inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia

Sequence 15 BP; 7 A; 1 C; 7 G; 0 T; 0 U; 0 Other;

Query Match 14.0%; Score 10.2; DB 1; Length 15;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

919 CTTTGGCTTTATCC 933

|||||

15 CTTTGGCTTTATCC 1

RESULT 619

AAF53512

ID AAF53512 standard; DNA; 15 BP.

AAF53512;

30-MAR-2001 (first entry)

IGF-I oligonucleotide #4472.

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
 cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
 skin disorder; insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
 IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
 growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
 keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
 hyperneovascular condition; hyperplasia; kidney disease;
 neovascular condition of the retina; ss.

Homo sapiens.

WO200078341-A1.

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693.

21-JUN-1999; 99US-0140345P.

(MURD-) MURDOCH CHILDRENS RES INST.

Wright CJ, Werther GA, Edmondson SR;

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 8; Page 90; 201pp; English.

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-

F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia

Sequence 15 BP; 0 A; 8 C; 0 G; 7 T; 0 U; 0 Other;

Query Match 14.0%; Score 10.2; DB 1; Length 15;
Best Local Similarity 80.0%; Pred. NO. 1.1e+03;
Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 924 CCTTTATCCCTCCT 938
||| ||| ||| ||| |||
Db 1 CCTTTCTCTCCT 15

RESULT 620
AAF50426
ID AAF50426 standard; DNA; 15 BP.
XX
AC AAF50426;
XX
DT 30-MAR-2001 (first entry)
XX
DE IGF-I oligonucleotide #1386.
XX
KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cystostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease;
XX
OS Homo sapiens.
XX
EN WO200078341-A1.
XX
PD 28-DEC-2000.
XX
PF 21-JUN-2000; 2000WO-AU000693.
XX
PR 21-JUN-1999; 99US-0140345P.
XX
PA (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI Wright CJ, Werther GA, Edmondson SR;
XX
DR WPI; 2001-041421/05.
XX
PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.
XX
PS Example 8; Page 69; 201pp; English.
XX
CC The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina,

CC brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia

Sequence 15 BP; 2 A; 5 C; 1 G; 7 T; 0 U; 0 Other;

Query Match 14.0%; Score 10.2; DB 1; Length 15;
Best Local Similarity 80.0%; Pred. NO. 1.1e+03;
Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 919 CTTTGCCCTTTATCC 933
||| ||| ||| ||| |||
Db 1 CTTTGCTTCAATCC 15

RESULT 621
AAF50427
ID AAF50427 standard; DNA; 15 BP.
XX
AC AAF50427;
XX
DT 30-MAR-2001 (first entry)
XX
DE IGF-I oligonucleotide #1387.
XX
KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cystostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease;
XX
OS Homo sapiens.
XX
EN WO200078341-A1.
XX
PD 28-DEC-2000.
XX
PF 21-JUN-2000; 2000WO-AU000693.
XX
PR 21-JUN-1999; 99US-0140345P.
XX
PA (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI Wright CJ, Werther GA, Edmondson SR;
XX
DR WPI; 2001-041421/05.
XX
PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.
XX
PS Example 8; Page 70; 201pp; English.
XX
CC The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia

Sequence 15 BP; 2 A; 5 C; 1 G; 7 T; 0 U; 0 Other;

Query Match 14.0%; Score 10.2; DB 1; Length 15;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

920 TTGCTTTTATCC 934
|||||
1 TTGCTTCAATCC 15

SULT 622

F53501

AAF53501 standard; DNA; 15 BP.

AAF53501;

30-MAR-2001 (first entry)

IGF-I oligonucleotide #4461.

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;
IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
hyperneovascular condition; hyperplasia; kidney disease;
neovascular condition of the retina; ss.

Homo sapiens.

WO200078341-A1.

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693.

21-JUN-1999; 99US-0140345P.

(MURD-) MURDOCH CHILDRENS RES INST.

Wright CJ, Werther GA, Edmondson SR;

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering
UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
inhibits or reduces growth factor mediated cell proliferation and/or
inflammation.

Example 8; Page 90; 201pp; English.

The present invention relates to a method for ameliorating the effects of
skin disorders. The method comprises contacting the skin with an
antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
inhibiting or reducing growth factor mediated cell proliferation,
inflammation and/or other disorders. The present sequence is an
oligonucleotide which can be used to design the antisense
oligonucleotides of the present invention (see AAF45151 and AAF45153-
F45161). The method is useful for ameliorating the effects of psoriasis,
ichthyosis, ptyriasis, ruba, pilaris, serborrhea, keloids, keratosis,
neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
hyperneovascular condition such as a neovascular condition of the retina,
brain or skin, growth factor-mediated malignancies, other sclerotic
disease, kidney disease, hyperproliferation of the inside of blood
vessels or any other hyperplasia

Sequence 15 BP; 0 A; 7 C; 1 G; 7 T; 0 U; 0 Other;

Query Match 14.0%; Score 10.2; DB 1; Length 15;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 921 TTGCTTTTATCCCT 935

Db 1 TTCCCTGTCCTCCCT 15

RESULT 623

AAF47198/C

ID AAF47198 standard; DNA; 15 BP.

XX AC

XX AAF47198;

XX DT 30-MAR-2001 (first entry)

XX DE IGFBP3 oligonucleotide #618.

XX KW

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;
IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
hyperneovascular condition; hyperplasia; kidney disease;
neovascular condition of the retina; ss.

XX OS Homo sapiens.

XX PN WO200078341-A1.

XX PD 28-DEC-2000.

XX PF 21-JUN-2000; 2000WO-AU000693.

XX PR 21-JUN-1999; 99US-0140345P.

XX PA (MURD-) MURDOCH CHILDRENS RES INST.

XX PI Wright CJ, Werther GA, Edmondson SR;

XX DR WPI; 2001-041421/05.

XX XX

XX PT

XX PT

XX PT

XX PT

XX XX

XX PS

XX CC

XX CC

XX CC

XX CC

XX CC

XX CC

XX CC

XX CC

XX CC

XX CC

XX CC

XX CC

XX CC

XX CC

XX CC

XX CC

XX CC

XX CC

XX CC

XX CC

XX CC

XX CC

XX CC

XX CC

XX CC

XX CC

XX CC

XX CC

XX CC

XX CC

XX CC

XX CC

XX CC

XX CC

XX CC

XX CC

```

fb 15 TCATGATTATCTTGT 1
RESULT 624
AAF48479
ID AAF48479 standard; DNA; 15 BP.
XX
AC
XX
DT 30-MAR-2001 (first entry)
XX
DE IGFBP3 oligonucleotide #1899.
XX
KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW hyperneovascular condition; hyperplasia; kidney disease;
KW neovascular condition of the retina; ss.
OS Homo sapiens.
XX
PN WO200078341-A1.
XX
PD 28-DEC-2000.
XX
PF 21-JUN-2000; 2000WO-AU000693.
XX
PR 21-JUN-1999; 99US-0140345P.
XX
PA (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI Wright CJ, Werther GA, Edmondson SR;
XX
DR WPI; 2001-041421/05.
XX
PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT inhibits or reduces growth factor mediated cell proliferation and/or
PT inflammation.
XX
PS Example 7; Page 56; 201pp; English.
XX
CC The present invention relates to a method for ameliorating the effects of
CC skin disorders. The method comprises contacting the skin with an
CC antisense oligonucleotide, (for insulin-like Growth Factor [IGF]-1
CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC inhibiting or reducing growth factor mediated cell proliferation,
CC inflammation and/or other disorders. The present sequence is an
CC oligonucleotide which can be used to design the antisense
CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC F45161). The method is useful for ameliorating the effects of psoriasis,
CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC hyperneovascular condition such as a neovascular condition of the retina,
CC brain or skin, growth factor-mediated malignancies, other sclerotic
CC disease, kidney disease, hyperproliferation of the inside of blood
CC vessels or any other hyperplasia
XX
SQ Sequence 15 BP; 2 A; 5 C; 0 G; 8 T; 0 U; 0 Other;
Query Match 14.0%; Score 10.2; DB 1; Length 15;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 927 TTTATCCCTCTCTCT 941
||| ||| ||| ||| |||
DB 1 TTCATCTCTCATCT 15
RESULT 625

```

```

AAF48478
ID AAF48478 standard; DNA; 15 BP.
XX
AC
XX
DT 30-MAR-2001 (first entry)
XX
DE IGFBP3 oligonucleotide #1898.
XX
KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW hyperneovascular condition; hyperplasia; kidney disease;
KW neovascular condition of the retina; ss.
OS Homo sapiens.
XX
PN WO200078341-A1.
XX
PD 28-DEC-2000.
XX
PF 21-JUN-2000; 2000WO-AU000693.
XX
PR 21-JUN-1999; 99US-0140345P.
XX
PA (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI Wright CJ, Werther GA, Edmondson SR;
XX
DR WPI; 2001-041421/05.
XX
PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT inhibits or reduces growth factor mediated cell proliferation and/or
PT inflammation.
XX
PS Example 7; Page 56; 201pp; English.
XX
CC The present invention relates to a method for ameliorating the effects of
CC skin disorders. The method comprises contacting the skin with an
CC antisense oligonucleotide, (for insulin-like Growth Factor [IGF]-1
CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC inhibiting or reducing growth factor mediated cell proliferation,
CC inflammation and/or other disorders. The present sequence is an
CC oligonucleotide which can be used to design the antisense
CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC F45161). The method is useful for ameliorating the effects of psoriasis,
CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC hyperneovascular condition such as a neovascular condition of the retina,
CC brain or skin, growth factor-mediated malignancies, other sclerotic
CC disease, kidney disease, hyperproliferation of the inside of blood
CC vessels or any other hyperplasia
XX
SQ Sequence 15 BP; 2 A; 5 C; 0 G; 8 T; 0 U; 0 Other;
Query Match 14.0%; Score 10.2; DB 1; Length 15;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 926 TTTTATCCCTCTCTCT 940
||| ||| ||| ||| |||
DB 1 TTTTCATCTCTCATCT 15
RESULT 626
AAF51294/c
ID AAF51294 standard; DNA; 15 BP.
XX
AC
AAF51294;

```

30-MAR-2001 (first entry)
 IGF-I oligonucleotide #2254.
 Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
 cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
 skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
 IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
 growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
 keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
 hyperneovascular condition; hyperplasia; kidney disease;
 neovascular condition of the retina; ss.
 Homo sapiens.
 WO200078341-A1.
 28-DEC-2000.
 21-JUN-2000; 2000WO-AU000693.
 21-JUN-1999; 99US-0140345P.
 (MURD-) MURDOCH CHILDRENS RES INST.
 Wright CJ, Werther GA, Edmondson SR;
 WPI; 2001-041421/05.
 Ameliorating the effects of a disorder, e.g. psoriasis, by administering
 UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
 inhibits or reduces growth factor mediated cell proliferation and/or
 inflammation.
 Example 8; Page 75; 201pp; English.
 The present invention relates to a method for ameliorating the effects of
 skin disorders. The method comprises contacting the skin with an
 antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
 inhibiting or reducing growth factor mediated cell proliferation,
 inflammation and/or other disorders. The present sequence is an
 oligonucleotide which can be used to design the antisense
 oligonucleotides of the present invention (see AAF45151 and AAF45153-
 F45161). The method is useful for ameliorating the effects of psoriasis,
 ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
 neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
 hyperneovascular condition such as a neovascular condition of the retina,
 brain or skin, growth factor-mediated malignancies, other sclerotic
 disease, kidney disease, hyperproliferation of the inside of blood
 vessels or any other hyperplasia
 Sequence 15 BP; 6 A; 1 C; 7 G; 1 T; 0 U; 0 Other;
 Query Match 14.0%; Score 10.2; DB 1; Length 15;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 930 ATCCCTCCTCTTCAT 944
 |||||
 15 ATCTCTCCGCTCTCT 1
 RESULT 627
 AF50092/c
 D AAF50092 standard; DNA; 15 BP.
 X C
 X C AAF50092;
 X
 T 30-MAR-2001 (first entry)
 X IGF-I oligonucleotide #1052.
 E

XX
 KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
 KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
 KW hyperneovascular condition; hyperplasia; kidney disease;
 KW neovascular condition of the retina; ss.
 XX Homo sapiens.
 OS
 XX WO200078341-A1.
 XX 28-DEC-2000.
 XX 21-JUN-2000; 2000WO-AU000693.
 XX 21-JUN-1999; 99US-0140345P.
 XX (MURD-) MURDOCH CHILDRENS RES INST.
 XX Wright CJ, Werther GA, Edmondson SR;
 PI WPI; 2001-041421/05.
 DR
 XX
 XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering
 PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
 PT inhibits or reduces growth factor mediated cell proliferation and/or
 PT inflammation.
 PT
 XX Example 8; Page 67; 201pp; English.
 XX The present invention relates to a method for ameliorating the effects of
 CC skin disorders. The method comprises contacting the skin with an
 CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
 CC inhibiting or reducing growth factor mediated cell proliferation,
 CC inflammation and/or other disorders. The present sequence is an
 CC oligonucleotide which can be used to design the antisense
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
 CC F45161). The method is useful for ameliorating the effects of psoriasis,
 CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
 CC hyperneovascular condition such as a neovascular condition of the retina,
 CC brain or skin, growth factor-mediated malignancies, other sclerotic
 CC disease, kidney disease, hyperproliferation of the inside of blood
 CC vessels or any other hyperplasia
 XX Sequence 15 BP; 10 A; 3 C; 2 G; 0 T; 0 U; 0 Other;
 SQ
 Query Match 14.0%; Score 10.2; DB 1; Length 15;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 915 TGCTCTTTGCTTTT 929
 |||||
 15 TGCTCTTTGCTTTCT 1
 QY
 Db
 RESULT 628
 AAF48963
 ID AAF48963 standard; DNA; 15 BP.
 XX
 XX AAF48963;
 XX
 XX 30-MAR-2001 (first entry)
 DT
 XX IGFBP3 oligonucleotide #2383.
 XX
 KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
 KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
 KW

KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
 FW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
 VW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
 XW hyperneovascular condition; hyperplasia; kidney disease;
 XW neovascular condition of the retina; ss.

XX Homo sapiens.

OS WO200078341-A1.

PN 28-DEC-2000.

PD 21-JUN-2000; 2000WO-AU000693.

XX 21-JUN-1999; 99US-0140345P.

XX (MURD-) MURDOCH CHILDRENS RES INST.

PA Wright CU, Werther GA, Edmondson SR;

PI WPI; 2001-041421/05.

DR Ameliorating the effects of a disorder, e.g. psoriasis, by administering

PT UV (ultra-violet) treatment (optional) and an antisenese nucleic acid that

PT inhibits or reduces growth factor mediated cell proliferation and/or

PT inflammation.

PS Example 7; Page 59; 201pp; English.

XX The present invention relates to a method for ameliorating the effects of

CC skin disorders. The method comprises contacting the skin with an

CC antisenese oligonucleotide, (for Insulin-like Growth Factor [IGF]-1

CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of

CC inhibiting or reducing growth factor mediated cell proliferation,

CC inflammation and/or other disorders. The present sequence is an

CC oligonucleotide which can be used to design the antisenese

CC oligonucleotides of the present invention (see AAP45151 and AAP45153-

CC F45161). The method is useful for ameliorating the effects of psoriasis,

CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,

CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a

CC hyperneovascular condition such as a neovascular condition of the retina,

CC brain or skin, growth factor-mediated malignancies, other sclerotic

CC disease, kidney disease, hyperproliferation of the inside of blood

CC vessels or any other hyperplasia

XX Sequence 15 BP; 3 A; 1 C; 0 G; 11 T; 0 U; 0 Other;

SQ Query Match 14.0%; Score 10.2; DB 1; Length 15;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 938 TCCTCATGTTTAA 952

Do 1 TCCTTATTTTAA 15

RESULT 629

AAF53513

ID AAF53513 standard; DNA; 15 BP.

XX AAF53513;

XX 30-MAR-2001 (first entry)

XX IGF-I oligonucleotide #4473.

XX Antisenese therapy; antiproliferative; antiinflammatory; antipsoriatic;

KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;

KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;

KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;

KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;

KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;

KW hyperneovascular condition; hyperplasia; kidney disease;

KW

KW neovascular condition of the retina; ss.

XX Homo sapiens.

PN WO200078341-A1.

XX 28-DEC-2000.

XX 21-JUN-2000; 2000WO-AU000693.

XX 21-JUN-1999; 99US-0140345P.

XX (MURD-) MURDOCH CHILDRENS RES INST.

XX Wright CU, Werther GA, Edmondson SR;

PI WPI; 2001-041421/05.

DR Ameliorating the effects of a disorder, e.g. psoriasis, by administering

PT UV (ultra-violet) treatment (optional) and an antisenese nucleic acid that

PT inhibits or reduces growth factor mediated cell proliferation and/or

PT inflammation.

PS Example 8; Page 90; 201pp; English.

XX The present invention relates to a method for ameliorating the effects of

CC skin disorders. The method comprises contacting the skin with an

CC antisenese oligonucleotide, (for Insulin-like Growth Factor [IGF]-1

CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of

CC inhibiting or reducing growth factor mediated cell proliferation,

CC inflammation and/or other disorders. The present sequence is an

CC oligonucleotide which can be used to design the antisenese

CC oligonucleotides of the present invention (see AAP45151 and AAP45153-

CC F45161). The method is useful for ameliorating the effects of psoriasis,

CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,

CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a

CC hyperneovascular condition such as a neovascular condition of the retina,

CC brain or skin, growth factor-mediated malignancies, other sclerotic

CC disease, kidney disease, hyperproliferation of the inside of blood

CC vessels or any other hyperplasia

XX Sequence 15 BP; 0 A; 8 C; 0 G; 7 T; 0 U; 0 Other;

SQ Query Match 14.0%; Score 10.2; DB 1; Length 15;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 925 CTTTATCCCTCCCTC 939

Db 1 CTTTCTCTCTCTC 15

RESULT 630

AAF49077/c

ID AAF49077 standard; DNA; 15 BP.

XX AAF49077;

XX 30-MAR-2001 (first entry)

XX IGF-I oligonucleotide #37.

XX Antisenese therapy; antiproliferative; antiinflammatory; antipsoriatic;

KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;

KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;

KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;

KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;

KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;

KW hyperneovascular condition; hyperplasia; kidney disease;

KW neovascular condition of the retina; ss.

XX Homo sapiens.

OS

PA (MURD-) MURDOCH CHILDRENS RES INST.
 XX
 PI Wright CJ, Werther GA, Edmondson SR;
 XX
 DR WPI; 2001-041421/05.
 XX
 PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering
 PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
 PT inhibits or reduces growth factor mediated cell proliferation and/or
 PT inflammation.
 XX
 PS Example 8; Page 75; 201pp; English.
 XX
 CC The present invention relates to a method for ameliorating the effects of
 CC skin disorders. The method comprises contacting the skin with an
 CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
 CC inhibiting or reducing growth factor mediated cell proliferation,
 CC inflammation and/or other disorders. The present sequence is an
 CC oligonucleotide which can be used to design the antisense
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
 CC F45161). The method is useful for ameliorating the effects of psoriasis,
 CC ichthyosis, pityriasis, ruba, pilaris, seborrheoa, keloids, keratosis,
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
 CC hyperneovascular condition such as a neovascular condition of the retina,
 CC brain or skin, growth factor-mediated malignancies, other sclerotic
 CC disease, kidney disease, hyperproliferation of the inside of blood
 CC vessels or any other hyperplasia
 XX
 SQ Sequence 15 BP; 7 A; 1 C; 7 G; 0 T; 0 U; 0 Other;
 Query Match 14.0%; Score 10.2; DB 1; Length 15;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 931 TCCTCTCTCTCTCTCT 945
 DB |||||
 15 TCCTCTCTCTCTCTCT 1
 RESULT 633
 ABX04014/c
 ID ABX04014 standard; DNA; 15 BP.
 XX
 AC ABX04014;
 XX
 DT 09-JAN-2003 (first entry)
 XX
 DE Resistance gene ermTR DNA fragment.
 XX
 KW Detection; probe; diagnosis; oral disease; paradontitis; caries; therapy;
 KW polymorphism; virulence factor; antibiotic resistance gene; prognosis;
 KW oral infection; detection; pathogen; coronary heart disease;
 KW diabetic symptom; ss.
 XX
 OS Unidentified.
 XX
 PN DE20110013-U1.
 XX
 PC 18-OCT-2001.
 XX
 PE 13-MAR-2001; 2001DE-02010013.
 XX
 PR 13-MAR-2001; 2001DE-01012348.
 XX
 XY 13-MAR-2001; 2001DE-02010013.
 XX
 PA (ROET/) ROETGER A.
 XX
 DR WPI; 2001-657777/76.
 XX
 PT Oligonucleotide array, useful for diagnosing oral diseases, particularly
 PT paradontitis, carries human or microbial reference sequences.
 XX

PS Claim 10; Page 29; 58pp; German.
 XX
 CC This invention describes a novel nucleotide carrier with probes used for
 CC diagnosis of oral diseases, particularly paradontitis, but also caries,
 CC especially to identify genetic predisposition (as indicated by
 CC polymorphisms) to disease and to identify causative microorganisms or
 CC their associated virulence factors and antibiotic resistance genes, e.g.
 CC for selection of therapy and for prognosis. They are also useful for
 CC research into oral infections. The carriers allow simultaneous detection
 CC of both host and pathogen parameters, providing quickly and simply an
 CC individual's paradontitis profile, including detection of pathogens that
 CC are associated with increased risk of coronary heart diseases and/or
 CC aggravation of diabetic symptoms, and of opportunistic pathogens.
 CC ABX03870-ABX04044 represent DNA fragments used to illustrate the method
 CC of the invention
 XX
 SQ Sequence 15 BP; 6 A; 3 C; 2 G; 4 T; 0 U; 0 Other;
 Query Match 14.0%; Score 10.2; DB 1; Length 15;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 941 TCATTGGTTTAATGT 955
 DB |||||
 15 TCCTTGGTAAATGT 1
 RESULT 634
 ABK23841/c
 ID ABK23841 standard; DNA; 15 BP.
 XX
 AC ABK23841;
 XX
 DT 09-APR-2002 (first entry)
 XX
 DE E. coli OmpA strong ribosome binding site.
 XX
 KW Vaccine; molecular scaffold; pilus; pilin; HBCAg; antigen;
 KW hepatitis B virus capsid protein; JUN; FOS; HIV gp140;
 KW measles virus N protein; bee venom phospholipase; Th type 2 T-helper;
 KW Th2; Sinbis virus E2 protein; amyloid beta; influenza M2 antigen;
 KW human immunodeficiency virus infection; viral hepatitis; measles;
 KW chicken pox; pneumonia; tuberculosis; syphilis; malaria; allergy; cancer;
 KW chronic disease; arthritis; colitis; diabetes; multiple sclerosis; ss;
 KW OmpA ribosome binding site.
 XX
 OS Escherichia coli.
 XX
 PN WO200185208-A2.
 XX
 PD 15-NOV-2001.
 XX
 PF 02-MAY-2001; 2001WO-IB000741.
 XX
 PR 05-MAY-2000; 2000US-0202341P.
 XX
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 PA (SEBH/) SEBBEL P.
 PA (DUNA/) DURANT N.
 PA (BACH/) BACHMANN M.
 PA (TISS/) TISSOT A.
 PA (LECH/) LECHNER F.
 XX
 PI Sebbel P, Durant N, Bachmann M, Tissot A, Lechener F;
 XX
 DR WPI; 2002-055561/07.
 XX
 PT New composition, useful for vaccine production, comprises antigen or
 PT antigenic determinant and non-natural molecular scaffold comprising
 PT organizer and core particle such as bacterial pilus or pilin protein.
 XX
 PS Example 6; Page 77; 287pp; English.
 XX

The invention relates to a composition comprising: (a) a non-natural molecular scaffold (molecular scaffold) which comprises a core particle such as a bacterial pilus or pilin protein, a recombinant form of the protein, a virus-like particle or a hepatitis B virus capsid protein (HBcAg), and an antigen; and (b) an antigen or antigenic determinant, where the molecular scaffold and antigenic determinant interact to form an ordered and repetitive antigen array. Suitable antigenic determinants include JUN, FOS, HIV gp140, measles virus N protein, bee venom phospholipase, Sindbis virus E2 protein, amyloid beta derived peptide and influenza M2 antigen. The composition (or vaccine) is useful for immunisation, by administration to a subject, where the administration produces an immune response, such as humoral, cellular or protective immune response, preferably a Th type 2 T-helper (Th2) response that is specific for the antigenic determinant. The administration induces antibodies specific for the antigenic determinant of a subtype corresponding to the Th2 subtype in the subject. The subject does not generate a Th2 subtype that is specific for pilus or pilin polypeptide or antigenic determinant. The composition is useful for the production of vaccines for prevention of infectious diseases such as human immunodeficiency virus, viral hepatitis, measles, chicken pox, pneumonia, tuberculosis, syphilis, malaria, and for treating allergy, cancer, and chronic diseases induced or accelerated by a Th1 type immune response, such as arthritis, colitis, diabetes and multiple sclerosis. The composition is useful to generate defined self-specific antibodies and specific immune responses of the Th2 type and allows the creation of highly efficient vaccines against infectious diseases, and for treating allergy, cancer, and chronic diseases induced or accelerated by a Th1 type immune response. The present invention is an OmpA ribosome binding site incorporated into vectors expressing compositions of the invention

Sequence 15 BP; 8 A; 1 C; 5 G; 1 T; 0 U; 0 Other;
Query Match 14.0%; Score 10.2; DB 1; Length 15;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
924 CCTTTTATCCCTCCT 938
| | | | | | | | | |
15 CGTTTTTACCTCCT 1

SULT 635
ABS70925/C
ABS70925 standard; DNA; 15 BP.
ABS70925;
10-DEC-2002 (first entry)
Molecular antigen array associated DNA sequence #13.
Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;
cytostatic; antiviral; antidiabetic; hypoglycaemic; antigen array;
vaccine; infectious disease; ds.
Unidentified.
WO200256905-A2.
25-JUL-2002.
21-JAN-2002; 2002WO-IB000166.
19-JAN-2001; 2001US-0262379P.
04-MAY-2001; 2001US-0288549P.
05-OCT-2001; 2001US-0326998P.
07-NOV-2001; 2001US-0331045P.
(CYTO-) CYTOS BIOTECHNOLOGY AG.
Renner WA, Bachmann M, Tissot A, Maurer P, Lechner F, Sebbel P;
Piossek C;

DR XX WPI; 2002-627351/67.
PT XX Molecular antigen array used in the production of vaccines for infectious diseases.
PS XX Disclosure; Page 311; 441pp; English.
XX XX This invention relates to a novel ordered and repetitive antigen array used in the production of vaccines for infectious diseases. The invention also discloses a composition comprising a non-natural molecular scaffold comprising a core particle selected from a core particle of a non-natural origin and a core particle of natural origin and an antigenic determinant at least one first attachment site, where the antigenic determinant is connected to the core particle by at least one covalent bond. Also disclosed is an antigen or antigenic determinant with at least one second attachment site, where the antigen or antigenic determinant is amyloid beta peptide (Abeta1-42) or its fragment and where the second attachment site is selected from an attachment site not naturally occurring with the antigen or antigenic determinant and an attachment site naturally occurring with the antigen or antigenic determinant, where the second attachment site is capable of association through at least one non-peptide bond to the first attachment site and where the antigen or antigenic determinant and the scaffold interact through the association to form an ordered and repetitive antigen array. The invention also comprises a coat protein capable of forming a capsid which comprises mutant Qbeta coat proteins having an amino acid sequence selected from five amino acid sequences fully defined in the specification. The compounds of the invention may have antimicrobial, antiallergic, immunomodulatory, cytostatic, antiviral, antidiabetic, or hypoglycaemic activities and may be used in immunisation and as a vaccine. The present sequence represents a DNA sequence used to create the compositions of the invention
XX XX Sequence 15 BP; 8 A; 1 C; 5 G; 1 T; 0 U; 0 Other;
SQ Query Match 14.0%; Score 10.2; DB 1; Length 15;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
924 CCTTTTATCCCTCCT 938
| | | | | | | | | |
15 CGTTTTTACCTCCT 1
RESULT 636
ABL59135
ID ABL59135 standard; DNA; 15 BP.
XX ABL59135;
AC ABL59135;
XX 07-AUG-2003 (revised)
DT 07-OCT-2002 (first entry)
XX PCR primer A-Au for a fragment of the LTR of ALSV.
DE Long terminal repeat; LTR; ALSV; lung cancer; ALSV-induced cancer; PCR;
XX primer; ss.
KW Avian leukosis virus.
XX US6391555-B1.
XX 21-MAY-2002.
XX 07-JAN-2000; 2000US-00479770.
XX 07-JAN-1999; 99US-0115087P.
XX (JOHN/) JOHNSON E S.
XX Johnson ES;
XX WPI; 2002-478534/51.
XX

PT Detecting avian leucosis/sarcoma virus (ALSV) nucleic acids, particularly
 PT long terminal repeats, in a DNA sample from a patient indicates that the
 PT patient has, or is likely to develop ALSV-induced lung cancer.

PS Claim 20; Col 9; 25pp; English.

XX PCR primers ABL59134-35 were used to amplify a fragment from a conserved
 CC region of the long terminal repeat (LTR) of avian leucosis/sarcoma virus
 CC (ALSV). The primers were used to screen for an increased potential for
 CC developing ALSV-induced lung cancer. The method comprises detecting ALSV
 CC nucleic acid sequences in DNA from a sample from the patient. The method
 CC is useful for the detection of ALSV-induced cancer. (Updated on 07-AUG-
 CC 2003 to correct OS field.)

XX Sequence 15 BP; 2 A; 6 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 14.0%; Score 10.2; DB 1; Length 15;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 930 ATCCCTCCTCTTCAT 944
 Db 1 AGCCTTCGCTTCAT 15

RESULT 637

ABL59137
 ID ABL59137 standard; DNA; 15 BP.

AC ABL59137;

DT 07-AUG-2003 (revised)

DT 07-OCT-2002 (first entry)

PC primer A-Auj for a fragment of the LTR of ALSV.

Long terminal repeat; LTR; ALSV; lung cancer; ALSV-induced cancer; PCR;
 primer; ss.

Avian leukosis virus.

US6391555-B1.

21-MAY-2002.

07-JAN-2000; 2000US-00479770.

07-JAN-1999; 99US-0115087P.

(JOHN/) JOHNSON E S.

Johnson ES;

WPI; 2002-478534/51.

Detecting avian leucosis/sarcoma virus (ALSV) nucleic acids, particularly
 PT long terminal repeats, in a DNA sample from a patient indicates that the
 PT patient has, or is likely to develop ALSV-induced lung cancer.

Claim 20; Col 9; 25pp; English.

XX PCR primers ABL59136-37 were used to amplify a fragment from a conserved
 CC region of the long terminal repeat (LTR) of avian leucosis/sarcoma virus
 CC (ALSV). The primers were used to screen for an increased potential for
 CC developing ALSV-induced lung cancer. The method comprises detecting ALSV
 CC nucleic acid sequences in DNA from a sample from the patient. The method
 CC is useful for the detection of ALSV-induced cancer. (Updated on 07-AUG-
 CC 2003 to correct OS field.)

XX Sequence 15 BP; 3 A; 6 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 14.0%; Score 10.2; DB 1; Length 15;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 930 ATCCCTCCTCTTCAT 944
 Db 1 AGCCTTCGCTTCAT 15

RESULT 638

ABS66351/C

ID ABS66351 standard; DNA; 15 BP.

AC ABS66351;

DT 29-NOV-2002 (first entry)

Molecular antigen array related modified ribosome binding site.

Molecular antigen array; vaccine; ss; primer; antimicrobial;

molecular scaffold; amyloid beta; Abeta 1-42; influenza;

graft versus host disease; IGE-mediated allergic reaction; anaphylaxis;

adult respiratory distress syndrome; ARDS; Crohn's disease;

allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;

Grave's disease; systemic lupus erythematosus; osteoporosis;

inflammatory immune disease; myasthenia gravis; multiple sclerosis;

immunoproliferative disease lymphadenopathy; Alzheimer's disease;

angioimmunoproliferative lymphadenopathy; immunoblastic lymphadenopathy;

rheumatoid arthritis; diabetes; infectious disease.

Unidentified.

WO200256907-A2.

25-JUL-2002.

21-JAN-2002; 2002WO-1B000168.

19-JAN-2001; 2001US-0262379P.

04-MAY-2001; 2001US-0288549P.

05-OCT-2001; 2001US-032698P.

07-NOV-2001; 2001US-0331045P.

(CYTO-) CYTOS BIOTECHNOLOGY AG.

(NOVS) NOVARTIS PHARMA AG.

(MAUR/) MAURER P.

(LECH/) LECHNER F.

(ORTM/) ORTMANN R.

(LUEO/) LUEOEND R.

(STAU/) STAUFENBIEL M.

(FREY/) FREY P.

Maurer P, Lechner F, Ortmann R, Lueoend R, Staufenbiel M, Frey P;
 Renner WA, Bachmann M, Tissot A, Sebbel P, Piossek C;

WPI; 2002-636514/68.

Molecular antigen array used in the production of vaccines for infectious
 PT diseases.

Disclosure; Page 289; 418pp; English.

XX The invention relates to a composition comprising: (a) a non-natural
 CC molecular scaffold comprising: (i) a core particle selected from: (1) a
 CC core particle of a non-natural origin; and (2) a core particle of natural
 CC origin; and (ii) an organiser comprising at least one first attachment
 CC site, where the organiser is connected to the core particle by at least
 CC one covalent bond; (b) an antigen or antigenic determinant with at least
 CC one second attachment site, where the antigen or antigenic determinant is
 CC amyloid beta peptide (Abeta 1-42) or its fragment, and where the second
 CC attachment site is selected from: (i) an attachment site not naturally
 CC occurring with the antigen or antigenic determinant; and (ii) an
 CC attachment site naturally occurring with the antigen or antigenic
 CC determinant, where the second attachment site is capable of association
 CC through at least one non-peptide bond to the first attachment site; and

Mon Oct 18 14:40:13 2004

where the antigen or antigenic determinant and the scaffold interact through the association to form an ordered and repetitive antigen array. Also included is a process for producing a non-naturally occurring ordered and repetitive antigen array. The composition is used in immunisation and as a vaccine for diseases such as influenza, graft versus host disease, IgE-mediated allergic reactions, anaphylaxis, adult respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma, acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, Grave's disease, systemic lupus erythematosus, inflammatory immune diseases, myasthenia gravis, immunoproliferative disease lymphadenopathy, angioimmunoproliferative lymphadenopathy, immunoblastic lymphadenopathy, rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease, osteoporosis and infectious diseases. The present sequence is a Molecular antigen array related DNA sequence which is included in the sequence listing but is not mentioned anywhere else in the specification

Sequence 15 BP; 8 A; 1 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 14.0%; Score 10.2; DB 1; Length 15;
Best Local Similarity 80.0%; Pred. NO. 1.1e+03;
Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

924 CCTTTATCCTCCT 938

15 CGTTTTTACCTCCT 1

SULT 639

ABL42623 ABL42623 standard; DNA; 15 BP.

ABL42623;

11-APR-2002 (first entry)

Hairpin beacon target hybridisation oligonucleotide #2.

Hybridisation; thermodynamic; computer readable storage medium; probe; target; molecular beacon; duplex; hairpin; ss.

Synthetic.

WO200194611-A2.

13-DEC-2001.

07-JUN-2001; 2001WO-US018424.

07-JUN-2000; 2000US-0209778P.

(UYWA-) UNIV WAYNE STATE.

Santalucia J, Peyret N;

WPI; 2002-122125/16.

Predicting nucleic acid hybridization thermodynamics based on hybridization information, thermodynamic parameter, correction data and first set of data which represents hybridization conditions.

Disclosure; Fig 8; 100pp; English.

The present invention describes a method for predicting nucleic acid hybridisation thermodynamics (HT) comprising providing a database of thermodynamic parameters (TP), receiving hybridisation information which represents a sequence, receiving correction data, and a first set of data which represents hybridisation conditions, and calculating HT including net HT based on the hybridisation information, TP, the correction data and the first set of data. Also described are: (1) a computer-readable storage medium having stored in it, a database of TP and a computer program which executes the above method; and (2) a system for predicting nucleic acid HT, comprising a database of TP, units for receiving hybridisation information which represents at least one sequence and for

receiving correction data, receiving a first set of data which represents hybridisation conditions and unit for calculating HT. The method and system are useful to optimise and predict probe-target hybridisation. The method and system takes into account of single strand folding thermodynamics to calculate effective hybridisation thermodynamics not taken into account by prior art methods. ABL42498 to ABL42626 represent oligonucleotide sequences which are used in the exemplification of the present invention

Sequence 15 BP; 0 A; 0 C; 4 G; 11 T; 0 U; 0 Other;

Query Match 14.0%; Score 10.2; DB 1; Length 15;
Best Local Similarity 80.0%; Pred. NO. 1.1e+03;
Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 903 GGTCATTTTCTTGG 917

DB 1 GGTTTTTTTTTTGG 15

RESULT 640

ABL42606 ABL42606 standard; DNA; 15 BP.

AC ABL42606;

11-APR-2002 (first entry)

Duplex sequence module 1 oligonucleotide #2.

Hybridisation; thermodynamic; computer readable storage medium; probe; target; molecular beacon; duplex; hairpin; ss.

Synthetic.

WO200194611-A2.

13-DEC-2001.

07-JUN-2001; 2001WO-US018424.

07-JUN-2000; 2000US-0209778P.

(UYWA-) UNIV WAYNE STATE.

Santalucia J, Peyret N;

WPI; 2002-122125/16.

Predicting nucleic acid hybridization thermodynamics based on hybridization information, thermodynamic parameter, correction data and first set of data which represents hybridization conditions.

Disclosure; Fig 2a; 100pp; English.

The present invention describes a method for predicting nucleic acid hybridisation thermodynamics (HT) comprising providing a database of thermodynamic parameters (TP), receiving hybridisation information which represents a sequence, receiving correction data, and a first set of data which represents hybridisation conditions, and calculating HT including net HT based on the hybridisation information, TP, the correction data and the first set of data. Also described are: (1) a computer-readable storage medium having stored in it, a database of TP and a computer program which executes the above method; and (2) a system for predicting nucleic acid HT, comprising a database of TP, units for receiving hybridisation information which represents at least one sequence and for receiving correction data, receiving a first set of data which represents hybridisation conditions, and predict probe-target hybridisation. The method and system are useful to optimise and predict single strand folding thermodynamics to calculate effective hybridisation thermodynamics not taken into account by prior art methods. ABL42498 to ABL42626 represent oligonucleotide sequences which are used in the exemplification of the

CC present invention
 XX Sequence 15 BP; 0 A; 0 C; 4 G; 11 T; 0 U; 0 Other;
 SQ Query Match 14.0%; Score 10.2; DB 1; Length 15;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 903 GGTCTTTTCTTTGG 917
 DB 1 GGTCTTTTCTTTGG 15

RESULT 641
 ID ABA91820/c
 XX ABA91820 standard; DNA; 15 BP.
 AC ABA91820;
 XX
 XX
 XX 15-MAY-2002 (first entry)
 DE Escherichia coli ompA gene ribosome binding site.
 XX
 XX Ribosome binding site; PBS; ompA gene; IgE; immunoglobulin E; allergy;
 KW asthma; eczema; urticaria; anaphylactic shock; allergic rhinitis;
 KW conjunctivitis; anti-anaphylactic; immunosuppressive; antiallergic;
 KW antiasthmatic; antiinflammatory; dermatological; vasotropic;
 KW ophthalmological; vaccine; therapy; ds.
 XX
 XX Escherichia coli.
 CS WO200209751-A2.
 XX
 XX 07-FEB-2002.
 PD
 XX
 XX 27-JUL-2001; 2001WO-IB001353.
 XX
 XX 28-JUL-2000; 2000US-0221841P.
 XX
 XX (CYTO-) CYTOS BIOTECHNOLOGY AG.
 PA (BACH/) BACHMANN M F.
 PA (RENN/) RENNER W A.
 XX
 XX Bachmann MF, Renner WA;
 PI WPI; 2002-227076/28.
 XX
 XX Composition for treating immunoglobulin (Ig) E-mediated disorder such as
 PT anaphylactic shock, allergic rhinitis and conjunctivitis, comprises a
 PT polypeptide that includes CH1 and/or CH4 domains of IgE molecule coupled
 PT to a carrier.
 XX
 XX Example; Page 38; 71pp; English.
 PS
 XX
 XX The present sequence is that of the strong ribosome binding site and 5'
 CC untranslated region of the Escherichia coli ompA gene. The sequence was
 CC used in a pAV vector series (see ABA91821-25) for expression of FOS
 CC fusion proteins in E. coli. The invention is based on the discovery that
 CC a polypeptide that includes the CH1 and/or CH4 domain(s) of an IgE
 CC molecule (see AAM50940), coupled to a carrier (e.g. FOS), can be used to
 CC induce self-specific anti-IgE antibodies in a mammal that reduce or
 CC eliminate the pool of free IgE in the mammal's serum. Claimed
 CC compositions comprising a carrier joined to the IgE derived polypeptide,
 CC or a polynucleotide encoding the fusion protein, are used to inhibit or
 CC prevent IgE-mediated disorders such as anaphylactic shock, allergic
 CC rhinitis or conjunctivitis, an allergic reaction to an allergen such as
 CC fur, dust or food, an asthmatic reaction, eczema or urticaria (all
 CC claimed)
 XX
 XX Sequence 15 BP; 8 A; 1 C; 5 G; 1 T; 0 U; 0 Other;
 SQ Query Match 14.0%; Score 10.2; DB 1; Length 15;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 924 CCTTTATCCTCTCT 938
 DB 15 CGTTTITACTCTCT 1

RESULT 642
 AAS95955
 ID AAS95955 standard; DNA; 15 BP.
 XX
 XX AAS95955;
 XX
 XX 26-FEB-2002 (first entry)
 DT Human CALM1 gene allele-specific oligonucleotide #64.
 DE
 DE
 XX
 XX Calmodulin 1; CALM1; human; single nucleotide polymorphism; SNP;
 KW haplotyping; SCYA3; Alzheimer's disease; drug screening;
 KW calcium-dependent signal transduction; PCR primer; ss.
 XX
 XX Homo sapiens.
 OS
 XX WO200179218-A2.
 PN
 XX 25-OCT-2001.
 PD
 XX
 XX 09-APR-2001; 2001WO-US011509.
 PF
 XX
 XX 12-APR-2000; 2000US-0196340P.
 PR
 XX (GENA-) GENAISSANCE PHARM INC.
 PA
 XX Bentivegna SC, Chew A, Choi JY, Koshy B, Stephens JC;
 PI WPI; 2002-049190/06.
 DR
 XX
 XX New calmodulin-1 (CALM-1) isogene polymorphic variants, useful in
 PT expressing CALM1 protein for use in screening for candidate drugs to
 PT treat diseases related to CALM1 activity such as Alzheimer's disease.
 PT
 XX
 XX Claim 15; Page 13; 82pp; English.
 PS
 XX
 XX The invention relates to an isolated polynucleotide comprising a sequence
 CC selected from a polymorphic variant of calmodulin 1 (CALM1). The
 CC polymorphic variant comprises an CALM1 isogene defined by a haplotype
 CC selected from haplotypes 1-21 given in the specification. The
 CC polymorphisms are useful for studying the biological function of CALM1 as
 CC well as in identifying drugs targeting this protein for the treatment of
 CC a disorder related to its abnormal expression or function. The
 CC polymorphic variants may also be used in screening for compounds
 CC targeting CALM1 to treat a specific condition or disease predicted to be
 CC associated with CALM1 activity. Establishing CALM1 haplotype or haplotype
 CC pair of an individual is useful for improving the efficiency and
 CC reliability of several steps in the discovery and development of drugs
 CC for treating diseases associated with SCYA3 activity, e.g. Alzheimer's
 CC disease and diseases involving defects in calcium-dependent signal
 CC transduction. Haplotyping the CALM1 gene in an individual is also useful
 CC in the design of clinical trials of candidate drugs for treating a
 CC specific condition or disease predicted to be associated with CALM1
 CC activity. AAS95892-AAS96018 represent human CALM1 allele- specific
 CC oligonucleotides and PCR primers of the invention
 XX
 XX Sequence 15 BP; 1 A; 2 C; 0 G; 11 T; 0 U; 1 Other;
 SQ Query Match 14.0%; Score 10.2; DB 1; Length 15;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 908 TTTTCTTTGGTCTTT 922
 DB 1 TTTTCTTTACTCTT 15

QY 930 ATCCCTCTCTCTTCAT 944
 Db 1 AUGCCUACUUCU 15

RESULT 645

ADD71432
 ID ADD71432 standard; DNA; 15 BP.

XX AC ADD71432;
 XX DT 15-JAN-2004 (first entry)

XX DE Stimulus-responsive DNA organization oligonucleotide #2.

XX ss; stimulus-responsive DNA organization; supercoil; rotation;
 FW external stimulus; medical micromachines; artificial muscle.

XX CS Synthetic.

XX WO2003072772-A1.

XX PD 04-SEP-2003.

XX EP 28-AUG-2002; 2002WO-JP008656.

XX FR 27-FEB-2002; 2002JP-00051927.

XX PA (NISC-) JAPAN SCI & TECHNOLOGY CORP.

XX PI Yui N, Ootani T;

XX DR WPI; 2003-679952/64.

XX Stimulus-responsive DNA organization of highly compatible functional

PT material undergoing reversible formation/dissociation of supercoil or

PT rotation in response to external stimulus, useful as e.g. artificial

PT muscles.

XX Example 1; SEQ ID NO 3; 29pp; Japanese.

XX The invention relates to a stimulus-responsive DNA organization

CC undergoing formation/dissociation of a supercoil or rotation in response

CC to an external stimulus and comprises a number of plasmid DNAs ligated in

CC it. The DNA organization is applicable in various materials and body

CC parts or medical micromachines e.g. artificial muscles. This sequence

CC represents an oligonucleotide used in the method of the invention.

XX Sequence 15 BP; 0 A; 5 C; 0 G; 10 T; 0 U; 0 Other;

SQ

Query Match

Best Local Similarity 14.0%; Score 10.2; DB 1; Length 15;

Matches 12; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 908 TTTTCTTTGGTCTTT 922

Db 1 TCTTCTTCTCTTT 15

RESULT 646

AAQ52921

ID AAQ52921 standard; RNA; 10 BP.

XX AC AAQ52921;

XX DT 25-MAR-2003 (revised)

XX EP 26-MAY-1994 (first entry)

XX Influenza virus target sequence 31.

XX RNA; enzyme; enzymatic RNA molecule; ERM; cleave; RNA; mRNA; HnRNA;

XX picornavirus; HIV; immunodeficiency virus; hepatitis B virus; HBV;

XX papilloma virus; HPV; Epstein-Barr virus; EBV; TCLV;

XX

KW T-cell leukaemia virus; hepatitis C virus; HCV; cytomegalovirus;
 KW influenza virus; HSV; herpes simplex virus; vector; immune response;
 KW antibody; ribozyme; viral RNA; treatment; ss.
 XX Synthetic.

XX WO9323569-A1.

XX PD 25-NOV-1993.

XX PF 29-APR-1993; 93WO-US004020.

XX PR 11-MAY-1992; 92US-00882689.

XX PR 14-MAY-1992; 92US-00882712.

XX PR 14-MAY-1992; 92US-00882713.

XX PR 14-MAY-1992; 92US-00882714.

XX PR 14-MAY-1992; 92US-00882823.

XX PR 14-MAY-1992; 92US-00882824.

XX PR 14-MAY-1992; 92US-00882886.

XX PR 14-MAY-1992; 92US-00882888.

XX PR 14-MAY-1992; 92US-00882889.

XX PR 14-MAY-1992; 92US-00882921.

XX PR 14-MAY-1992; 92US-00883823.

XX PR 14-MAY-1992; 92US-00883849.

XX PR 14-MAY-1992; 92US-00884073.

XX PR 14-MAY-1992; 92US-00884074.

XX PR 14-MAY-1992; 92US-00884422.

XX PR 14-MAY-1992; 92US-00884431.

XX PR 14-MAY-1992; 92US-00884436.

XX PR 14-MAY-1992; 92US-00884521.

XX PR 31-JUL-1992; 92US-00923738.

XX PR 26-AUG-1992; 92US-00935854.

XX PR 26-AUG-1992; 92US-00936086.

XX PR 18-SEP-1992; 92US-00948359.

XX PR 15-OCT-1992; 92US-00963322.

XX PR 07-DEC-1992; 92US-00987129.

XX PR 07-DEC-1992; 92US-00987130.

XX PR 07-DEC-1992; 92US-00987133.

XX (RIBO-) RIBOZYME PHARM INC.

XX Draper KG, Dudycz LW, Mcswiggen JA, Macejak DG, Holecsek JJ;

XX Mamone JA;

XX WPI; 1993-386599/48.

XX Enzymatic RNA molecules - used to inhibit viral replication, infection

XX and gene expression.

XX Claim 5; Fig 14; 287pp; English.

XX The sequences (AAQ52921-052922) are pref. influenza virus target

XX sequences for enzymatic RNA molecules. The RNA molecules are

XX complementary to a substrate binding region in the specified gene target.

XX They also have enzymatic activity, in that they specifically cleave RNA

XX in the target. The ERMs interfere with viral replication and therefore

XX have anti-viral properties. They can be used to attenuate viruses to be

XX used in vaccines. (Updated on 25-MAR-2003 to correct PN field.) (Updated

XX on 25-MAR-2003 to correct PR field.) (Updated on 25-MAR-2003 to correct

XX PI field.)

XX SQ Sequence 10 BP; 1 A; 1 C; 2 G; 0 T; 6 U; 0 Other;

XX Query Match 13.7%; Score 10; DB 1; Length 10;

XX Best Local Similarity 40.0%; Pred. No. 8.9e+02;

XX Matches 4; Conservative 6; Mismatches 0; Indels 0; Gaps 0;

XX QY 902 TGGTCATTTT 911

XX Db 1 UGGUCAUUUU 10

JULT 647
 778610/c
 AA278610 standard; DNA; 10 BP.
 AA278610;
 10-APR-2000 (first entry)
 Human dendritic cell SAGE tag, SEQ ID NO:1038.
 SAGE tag; serial analysis of gene expression; antigen-presenting cell;
 APC; monocyte-derived dendritic cell; differential gene expression;
 immunostimulatory cofactor; costimulatory factor; CTL; cytotoxic T-lymphocyte; tumour antigen; immunotherapy; anticancer; ss.
 Homo sapiens.
 WO9965924-A2.
 23-DEC-1999.
 18-JUN-1999; 99WO-US013800.
 19-JUN-1998; 98US-0089833P.
 19-JUN-1998; 98US-0089844P.
 19-JUN-1998; 98US-0089853P.
 19-JUN-1998; 98US-0089878P.
 19-JUN-1998; 98US-0089911P.
 19-JUN-1998; 98US-0089922P.
 19-JUN-1998; 98US-0089933P.
 19-JUN-1998; 98US-0089944P.
 19-JUN-1998; 98US-0089972P.
 19-JUN-1998; 98US-0089999P.
 19-JUN-1998; 98US-0090000P.
 19-JUN-1998; 98US-0090035P.
 19-JUN-1998; 98US-0090036P.
 19-JUN-1998; 98US-0090039P.
 19-JUN-1998; 98US-0090040P.
 19-JUN-1998; 98US-0090041P.
 19-JUN-1998; 98US-0090042P.
 19-JUN-1998; 98US-0090043P.
 19-JUN-1998; 98US-0090044P.
 19-JUN-1998; 98US-0090045P.
 19-JUN-1998; 98US-0090047P.
 19-JUN-1998; 98US-0090048P.
 19-JUN-1998; 98US-0090072P.
 19-JUN-1998; 98US-0090076P.
 19-JUN-1998; 98US-0090077P.
 19-JUN-1998; 98US-0090078P.
 19-JUN-1998; 98US-0090079P.
 19-JUN-1998; 98US-0090080P.
 08-DEC-1998; 98US-0111715P.
 (GENZ) GENZYME CORP.
 (ROBE/) ROBERTS B L.
 (SHAN/) SHANKARA S.
 Roberts BL, Shankara S;
 WPI; 2000-106077/09.
 Isolated polynucleotides differentially expressed in antigen-presenting cells, useful in gene vaccines against cancer.
 Claim 1; Page 94; 130pp; English.
 Sequences AA277573-279709 represent SAGE (serial analysis of gene expression) tags used to identify mRNA transcripts encoding immunostimulatory cofactor proteins which are preferentially or differentially expressed in monocyte-derived dendritic cells compared with monocytes. Some of the transcripts correspond to known genes or ESTs (expressed sequence tags) which were previously unknown to be

other transcripts correspond to novel genes. Analysis of the role in the (APC)-associated costimulatory factors play an important role in the activation of the cytotoxic immune response, particularly against tumour cells. Tumour antigen presentation via the MHC (major histocompatibility complex) and subsequent recognition by T-cell receptors is alone insufficient to activate a robust cytotoxic immune response that can lyse the tumour cells, immunostimulatory cofactors also being required for efficient activation of cytotoxic T-lymphocytes (CTLs). Nucleic acid sequences identified using the SAGE tags have several potential uses. They may be used in vaccines to induce an immune response, particularly against a tumour antigen; to modulate the genotype of an APC; to screen for agents that modulate expression of differentially expressed genes in an APC; and as hybridisation probes/amplification primers for the diagnosis, prognosis and monitoring of diseases related to abnormal expression of these genes. Detection of the dendritic cell differentially expressed genes, or of their encoded proteins, can be used to identify cells as belonging to the monocyte lineage. Cells containing these genes can be used in active immunotherapy (or to stimulate production of a population of antigen-specific effector cells) and vectors containing them are used in gene therapy. Co-administration of tumour antigens and APC-associated costimulatory factors ensures adequate antigen presentation to endogenous APCs and upregulates the APCs for the presentation of co-stimulatory signals, migration to T cell-rich sites, secretion of T cell growth factors and secretion of chemokines for recruitment of immune effector cells

Query Match 13.7%; Score 10; DB 1; Length 10;
 Best Local Similarity 100.0%; Pred. No. 8.9e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0
 QY 929 TATCCCTCCT 938
 Db 10 TATCCCTCCT 1
 RESULT 648
 AA279599/c
 ID AA279599 standard; DNA; 10 BP.
 AC AA279599;
 XX
 XX 10-APR-2000 (first entry)
 DT Human dendritic cell SAGE tag, SEQ ID NO:2027.
 DE SAGE tag; serial analysis of gene expression; antigen-presenting cell;
 XX APC; monocyte-derived dendritic cell; differential gene expression;
 KW immunostimulatory cofactor; costimulatory factor; CTL; anticancer; ss.
 KW cytotoxic T-lymphocyte; tumour antigen; immunotherapy; anticancer; ss.
 XX Homo sapiens.
 OS
 XX
 XX WO9965924-A2.
 PN
 XX
 XX 23-DEC-1999.
 PD
 XX
 XX 18-JUN-1999; 99WO-US013800.
 PF
 XX
 PR 19-JUN-1998; 98US-0089833P.
 PR 19-JUN-1998; 98US-0089844P.
 PR 19-JUN-1998; 98US-0089853P.
 PR 19-JUN-1998; 98US-0089878P.
 PR 19-JUN-1998; 98US-0089911P.
 PR 19-JUN-1998; 98US-0089922P.
 PR 19-JUN-1998; 98US-0089933P.
 PR 19-JUN-1998; 98US-0089944P.
 PR 19-JUN-1998; 98US-0089972P.
 PR 19-JUN-1998; 98US-0089999P.
 PR 19-JUN-1998; 98US-0090000P.
 PR 19-JUN-1998; 98US-0090035P.
 PR 19-JUN-1998; 98US-0090036P.
 PR 19-JUN-1998; 98US-0090039P.
 PR 19-JUN-1998; 98US-0090040P.
 PR 19-JUN-1998; 98US-0090041P.
 PR 19-JUN-1998; 98US-0090042P.
 PR 19-JUN-1998; 98US-0090043P.
 PR 19-JUN-1998; 98US-0090044P.
 PR 19-JUN-1998; 98US-0090045P.
 PR 19-JUN-1998; 98US-0090047P.
 PR 19-JUN-1998; 98US-0090048P.
 PR 19-JUN-1998; 98US-0090072P.
 PR 19-JUN-1998; 98US-0090076P.
 PR 19-JUN-1998; 98US-0090077P.
 PR 19-JUN-1998; 98US-0090078P.
 PR 19-JUN-1998; 98US-0090079P.
 PR 19-JUN-1998; 98US-0090080P.
 PR 08-DEC-1998; 98US-0111715P.
 PR

PR 19-JUN-1998; 98US-0090036P.
PR 19-JUN-1998; 98US-0090039P.
PR 19-JUN-1998; 98US-0090040P.
PR 19-JUN-1998; 98US-0090041P.
PR 19-JUN-1998; 98US-0090042P.
PR 19-JUN-1998; 98US-0090043P.
PR 19-JUN-1998; 98US-0090044P.
PR 19-JUN-1998; 98US-0090045P.
PR 19-JUN-1998; 98US-0090047P.
PR 19-JUN-1998; 98US-0090048P.
PR 19-JUN-1998; 98US-0090072P.
PR 19-JUN-1998; 98US-0090076P.
PR 19-JUN-1998; 98US-0090077P.
PR 19-JUN-1998; 98US-0090078P.
PR 19-JUN-1998; 98US-0090079P.
PR 19-JUN-1998; 98US-0090080P.
PR 08-DEC-1998; 98US-0111715P.
XX
PA (GENZ) GENZYME CORP.
PA (ROBE/) ROBERTS B L.
PA (SHAN/) SHANKARA S.
XX
XX
PI Roberts BL, Shankara S;
XX
XX WPT; 2000-106077/09.

Isolated polynucleotides differentially expressed in antigen-presenting

cells, useful in gene vaccines against cancer.

Claim 1; Page 122; 130pp; English.

Sequences AAZ77573-279709 represent SAGE (serial analysis of gene expression) tags used to identify mRNA transcripts encoding immunostimulatory cofactor proteins which are preferentially or differentially expressed in monocyte-derived dendritic cells compared with monocytes. Some of the transcripts correspond to known genes or ESTs (expressed sequence tags) which were previously unknown to be preferentially or differentially expressed in dendritic cells, while other transcripts correspond to novel genes. Antigen-presenting cell (APC)-associated costimulatory factors play an important role in the activation of the cytotoxic immune response, particularly against tumour cells. Tumour antigen presentation via the MHC (major histocompatibility complex) and subsequent recognition by T-cell receptors is alone insufficient to activate a robust cytotoxic immune response that can lyse the tumour cells, immunostimulatory cofactors also being required for efficient activation of cytotoxic T-lymphocytes (CTLs). Nucleic acid sequences identified using the SAGE tags have several potential uses. They may be used in vaccines to induce an immune response, particularly against a tumour antigen; to modulate the genotype of an APC; to screen for agents that modulate expression of differentially expressed genes in an APC; and as hybridisation probes/amplification primers for the diagnosis, prognosis and monitoring of diseases related to abnormal expression of these genes. Detection of the dendritic cell differentially expressed genes, or of their encoded proteins, can be used to identify cells as belonging to the monocyte lineage. Cells containing these genes can be used in active immunotherapy (or to stimulate production of a population of antigen-specific effector cells) and vectors containing them are used in gene therapy. Co-administration of tumour antigens and APC-associated costimulatory factors ensures adequate antigen presentation to endogenous APCs and upregulates the APCs for the presentation of co-stimulatory signals, migration to T cell-rich sites, secretion of T cell growth factors and secretion of chemokines for recruitment of immune effector cells

Sequence 10 BP; 6 A; 1 C; 3 G; 0 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 8.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 918 TCTTTGCCCT 927

DB 10 TCTTTGCCCT 1

RESULT 649
AAZ78434/c
ID AAZ78434 standard; DNA; 10 BP.
XX
XX AC AAZ78434;
XX
DT 10-APR-2000 (first entry)
XX
DE Human dendritic cell SAGE tag, SEQ ID NO:862.
XX

XX SAGE tag; serial analysis of gene expression; antigen-presenting cell;
XX APC; monocyte-derived dendritic cell; differential gene expression;
XX immunostimulatory cofactor; costimulatory factor; CTL; cytotoxic T-lymphocyte; tumour antigen; immunotherapy; anticancer; ss.
XX
XX Homo sapiens.
XX
XX WO9965924-A2.
XX
XX 23-DEC-1999.
XX
XX 18-JUN-1999; 99WO-USQ13800.
XX

PR 19-JUN-1998; 98US-0089833P.
PR 19-JUN-1998; 98US-0089844P.
PR 19-JUN-1998; 98US-0089853P.
PR 19-JUN-1998; 98US-0089878P.
PR 19-JUN-1998; 98US-0089911P.
PR 19-JUN-1998; 98US-0089922P.
PR 19-JUN-1998; 98US-0089933P.
PR 19-JUN-1998; 98US-0089944P.
PR 19-JUN-1998; 98US-0089977P.
PR 19-JUN-1998; 98US-0089999P.
PR 19-JUN-1998; 98US-0090000P.
PR 19-JUN-1998; 98US-0090035P.
PR 19-JUN-1998; 98US-0090036P.
PR 19-JUN-1998; 98US-0090039P.
PR 19-JUN-1998; 98US-0090040P.
PR 19-JUN-1998; 98US-0090041P.
PR 19-JUN-1998; 98US-0090042P.
PR 19-JUN-1998; 98US-0090043P.
PR 19-JUN-1998; 98US-0090044P.
PR 19-JUN-1998; 98US-0090045P.
PR 19-JUN-1998; 98US-0090047P.
PR 19-JUN-1998; 98US-0090048P.
PR 19-JUN-1998; 98US-0090072P.
PR 19-JUN-1998; 98US-0090076P.
PR 19-JUN-1998; 98US-0090077P.
PR 19-JUN-1998; 98US-0090078P.
PR 19-JUN-1998; 98US-0090079P.
PR 19-JUN-1998; 98US-0090080P.
PR 08-DEC-1998; 98US-0111715P.

(GENZ) GENZYME CORP.

(ROBE/) ROBERTS B L.

(SHAN/) SHANKARA S.

Roberts BL, Shankara S;

WPT; 2000-106077/09.

Isolated polynucleotides differentially expressed in antigen-presenting cells, useful in gene vaccines against cancer.

Claim 1; Page 90; 130pp; English.

Sequences AAZ77573-279709 represent SAGE (serial analysis of gene expression) tags used to identify mRNA transcripts encoding immunostimulatory cofactor proteins which are preferentially or differentially expressed in monocyte-derived dendritic cells compared with monocytes. Some of the transcripts correspond to known genes or ESTs

(expressed sequence tags) which were previously unknown to be preferentially or differentially expressed in dendritic cells, while other transcripts correspond to novel genes. Antigen-presenting cell (APC)-associated costimulatory factors play an important role in the activation of the cytotoxic immune response, particularly against tumour cells. Tumour antigen presentation via the MHC (major histocompatibility complex) and subsequent recognition by T-cell receptors is alone insufficient to activate a robust cytotoxic immune response that can lyse the tumour cells, immunostimulatory cofactors also being required for efficient activation of cytotoxic T-lymphocytes (CTLs). Nucleic acid sequences identified using the SAGE tags have several potential uses. They may be used in vaccines to induce an immune response, particularly against a tumour antigen; to modulate the immune response, particularly for agents that modulate expression of the genotype of an APC; to screen an APC; and as hybridisation probes/amplification primers for the diagnosis, prognosis and monitoring of diseases related to abnormal expression of these genes. Detection of the dendritic cell differentially expressed genes, or of their encoded proteins, can be used to identify cells as belonging to the monocyte lineage. Cells containing these genes can be used in active immunotherapy (or to stimulate production of a population of antigen-specific effector cells) and vectors containing them are used in gene therapy. Co-administration of tumour antigens and APC-associated costimulatory factors ensures adequate antigen presentation to endogenous APCs and upregulates the APCs for the presentation of co-stimulatory signals, migration to T cell-rich sites, secretion of T cell growth factors and secretion of chemokines for recruitment of immune effector cells.

Sequence 10 BP; 7 A; 2 C; 1 G; 0 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 10;
 Best Local Similarity 100.0%; Pred. No. 8.9e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 913 TTGTGCTTT 922
 |||||
 10 TTGTGCTTT 1

RESULT 650

AAZ84747

AAZ84747 standard; DNA; 10 BP.

AAZ84747;

07-APR-2000 (first entry)

Metastatic breast tumour cell downregulated transcript tag #3981.

Human; metastatic breast tumour tissue; breast cancer; tag; primer;
 non-metastatic breast tumour tissue; gene therapy; anticancer;
 antimetastatic; vaccine; diagnosis; ss.

Homo sapiens.

WO9965928-A2.

23-DEC-1999.

18-JUN-1999; 99WO-US013647.

19-JUN-1998; 98US-0089853P.

19-JUN-1998; 98US-0089997P.

19-JUN-1998; 98US-0090039P.

19-JUN-1998; 98US-0090040P.

19-JUN-1998; 98US-0090041P.

(GENZ) GENZYME CORP.

(ROBE/) ROBERTS B L.

(SHAN/) SHANKARA S.

Roberts BL, Shankara S;

DR WPI; 2000-106079/09.

XX Isolated polynucleotides differentially expressed between metastatic and
 PT non-metastatic breast cancer cells, useful for diagnosis, prevention and
 PT treatment of cancer.

XX Claim 1; Page 164; 219pp; English.

XX AAZ80767 to AAZ83941 represent tags corresponding to distinct transcripts
 CC that are preferentially transcribed in the metastatic breast tumour
 CC tissue (i.e. are upregulated in metastatic breast tumour cells). AAZ83942
 CC to AAZ86677 represent tags corresponding to distinct transcripts that are
 CC preferentially transcribed in the primary or non-metastatic breast tumour
 CC tissue (i.e. are downregulated in metastatic breast tumour cells). These
 CC transcripts can be used for diagnosis, prognosis, monitoring and
 CC treatment of breast cancer, particularly where metastatic. Diagnosis is
 CC by standard immunoassays or hybridisation/amplification reactions.
 CC Compounds that modulate expression of the transcripts are potentially
 CC useful for treatment of (metastatic) breast cancer, while promoters from
 CC the transcripts are used to direct expression in selected cell types, of
 CC e.g. therapeutic genes (also ribozymes or antisense sequences),
 CC particularly an antigen-encoding sequence for use in gene or cell-based
 CC vaccines. Polypeptides encoded by the transcripts are also useful in
 CC vaccines; for diagnosing breast cancer and for raising specific
 CC antibodies (Ab). Ab are used to detect the polypeptides or as therapeutic
 CC agents. Host cells that produce the polypeptides can be used to expand
 CC and isolate populations of educated, antigen-specific immune effector
 CC cells, e.g. cytotoxic T lymphocytes, and these used for adoptive
 CC immunotherapy

XX Sequence 10 BP; 0 A; 1 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 10;
 Best Local Similarity 100.0%; Pred. No. 8.9e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 913 TTGTGCTTT 922

|||||
 Db 1 TTGTGCTTT 10

RESULT 651

AAH63232

ID AAH63232 standard; cDNA; 10 BP.

XX AC AAH63232;

XX 20-SEP-2001 (first entry)

XX Human colon epithelium specific transcriptome sequence SEQ ID NO: 72.

DE Human; transcriptome; gene expression pattern; cancer; drug screening;
 KW cancer diagnosis; cell specific gene expression; ss.

XX Homo sapiens.

XX WO200138577-A2.

XX 31-MAY-2001.

XX 21-NOV-2000; 2000WO-US031922.

XX 24-NOV-1999; 99US-00448480.

XX (UYJO) UNIV JOHNS HOPKINS.

PI Velculescu VE, Vogelstein B, Kinzler KW;

DR WPI; 2001-367706/38.

PT New isolated polynucleotides, useful for identifying specific cell type,
 PT such as cancer cell, comprises transcriptomes expressed in particular
 PT cell types.

XX Claim 11; Page 40; 94pp; English.

XX The present invention describes a method of identifying the type of cell

CC in a sample, involving determining which of the sequences AAH63161-

CC AAH64724 is expressed by the cell. The transcriptomes described in the

CC invention are cell-type specific, cancer specific or ubiquitously

CC expressed in humans. They can also be used to screen for drugs, reduce

CC cancer specific gene expression, standardise expression and restore the

CC function of a diseased cell or tissue. The present sequence is one of the

CC transcriptomes described in the exemplification of the invention

XX Sequence 10 BP; 1 A; 1 C; 2 G; 6 T; 0 U; 0 Other;

SQ Query Match 13.7%; Score 10; DB 1; Length 10;

Best Local Similarity 100.0%; Pred. No. 8.9e+02;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 941 TCATTGGTTT 950

DB 1 TCATTGGTTT 10

RESULT 652

AAF43800

ID AAF43800 standard; DNA; 10 BP.

AC AAF43800;

XX 23-MAR-2001 (first entry)

XX Yeast NORF gene SAGE tag oligonucleotide SEQ ID NO:11939.

DE Yeast; Saccharomyces cerevisiae; characterisation; cell cycle; NORF;

KW nor previously assigned open reading frame; nonannotated ORF; SAGE;

KW serial analysis of gene expression; antifungal; tag; identification;

KW linker; PCR primer; ds.

XX Saccharomyces cerevisiae.

XX WO200077214-A2.

XX 21-DEC-2000.

XX 14-JUN-2000; 2000WO-US016223.

XX 16-JUN-1999; 99US-00335032.

XX (UYJO) UNIV JOHNS HOPKINS.

XX Velculescu V, Vogelstein B, Kinzler K;

XX WPI; 2001-061874/07.

XX Yeast gene coding sequences comprising NORF genes with serial analysis of

PT gene expression (SAGE) tags, useful for studying, monitoring and

PT affecting phases of the cell cycle.

XX Example; Page 376; 419pp; English.

XX The present invention describes an isolated DNA molecule comprising a

CC coding sequence of a yeast gene selected from a group of 745 NORF (not

CC previously assigned open reading frame; or nonannotated ORF) genes

CC comprising a SAGE (serial analysis of gene expression) tag. Also

CC described are: (1) a method (M1) of using NORF genes to affect the cell

CC cycle comprising administering a NORF gene whose expression varies by at

CC least 10% between any two phases of the cell cycle selected from log

CC phase, S phase and G2/M; (2) a method (M2) for screening candidate

CC antifungal drugs comprising: (a) contacting a test substance with a yeast

CC cell; and (b) monitoring expression of a NORF gene whose expression

CC varies as in M1, where a test substance which modifies the expression of

CC the yeast gene is a candidate antifungal drug; (3) a method (M3) for

CC identifying human genes which are involved in cell cycle progression

CC comprising contacting human DNA with a probe which comprises at least 10

CC contiguous nucleotides of a NORF gene whose expression varies as in M1;

CC and (4) a method (M4) for identifying a candidate drug as a member of a

CC class of drugs having a characteristic effect on gene expression in a

CC yeast cell comprising contacting a yeast cell with a candidate drug and

CC monitoring expression in the yeast cell of at least 1 NORF gene whose

CC expression is affected by the class of drugs. The NORF genes may be used

CC to study, monitor and affect phases of the cell cycle, the differentially

CC expressed genes may be used as markers of phases of the cell cycle. The

CC methods may be used to identify candidate drugs which affect the cell

CC cycle and for identification of antifungal drugs. AAF33268 to AAF4064

CC represent SAGE tags used in the exemplification of the present invention.

CC AAF33262 to AAF33267 represent linkers and PCR primers used in the SAGE

CC method, in the exemplification of the present invention

XX Sequence 10 BP; 0 A; 1 C; 3 G; 6 T; 0 U; 0 Other;

SQ Query Match 13.7%; Score 10; DB 1; Length 10;

Best Local Similarity 100.0%; Pred. No. 8.9e+02;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 914 TTGGTCCTTG 923

DB 1 TTGGTCCTTG 10

RESULT 653

AAF39218/C

ID AAF39218 standard; DNA; 10 BP.

AC AAF39218;

XX 23-MAR-2001 (first entry)

XX Yeast NORF gene SAGE tag oligonucleotide SEQ ID NO:5957.

DE Yeast; Saccharomyces cerevisiae; characterisation; cell cycle; NORF;

KW nor previously assigned open reading frame; nonannotated ORF; SAGE;

KW serial analysis of gene expression; antifungal; tag; identification;

KW linker; PCR primer; ds.

XX Saccharomyces cerevisiae.

XX WO200077214-A2.

XX 21-DEC-2000.

XX 14-JUN-2000; 2000WO-US016223.

XX 16-JUN-1999; 99US-00335032.

XX (UYJO) UNIV JOHNS HOPKINS.

XX Velculescu V, Vogelstein B, Kinzler K;

XX WPI; 2001-061874/07.

XX Yeast gene coding sequences comprising NORF genes with serial analysis of

PT gene expression (SAGE) tags, useful for studying, monitoring and

PT affecting phases of the cell cycle.

XX Example; Page 212; 419pp; English.

XX The present invention describes an isolated DNA molecule comprising a

CC coding sequence of a yeast gene selected from a group of 745 NORF (not

CC previously assigned open reading frame; or nonannotated ORF) genes

CC comprising a SAGE (serial analysis of gene expression) tag. Also

CC described are: (1) a method (M1) of using NORF genes to affect the cell

CC cycle comprising administering a NORF gene whose expression varies by at

CC least 10% between any two phases of the cell cycle selected from log

CC phase, S phase and G2/M; (2) a method (M2) for screening candidate

CC antifungal drugs comprising: (a) contacting a test substance with a yeast

CC cell; and (b) monitoring expression of a NORF gene whose expression

varies as in M1, where a test substance which modifies the expression of the yeast gene is a candidate antifungal drug; (3) a method (M3) for identifying human genes which are involved in cell cycle progression comprising contacting human DNA with a probe which comprises at least 10 contiguous nucleotides of a NORF gene whose expression varies as in M1; and (4) a method (M4) for identifying a candidate drug as a member of a class of drugs having a characteristic effect on gene expression in a yeast cell comprising contacting a yeast cell with a candidate drug and monitoring expression in the yeast cell of at least 1 NORF gene whose expression is affected by the class of drugs. The NORF genes may be used to study, monitor and affect phases of the cell cycle, the differentially expressed genes may be used as markers of phases of the cell cycle. The methods may be used to identify candidate drugs which affect the cell cycle and for identification of antifungal drugs. AAF33268 to AAF44064 represent SAGE tags used in the exemplification of the present invention. AAF33262 to AAF33267 represent linkers and PCR primers used in the SAGE method, in the exemplification of the present invention

Sequence 10 BP; 7 A; 2 C; 1 G; 0 T; 0 U; 0 Other;
Query Match 13.7%; Score 10; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 8.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Y 909 TTCTTTGGT 918
| | | | |
C 10 TTCTTTGGT 1

RESULT 654
AAS95651/C
AAS95651 standard; DNA; 10 BP.

AAS95651;

14-FEB-2002 (first entry)

Human NPY1R gene allele-specific oligonucleotide PCR primer #6.

Human; neuropeptide Y receptor Y1; NPY1R; ss; antiarteriosclerotic;
haplotyping; haplotype pair; single nucleotide polymorphism; genotyping;
gene therapy; drug screening; cardiovascular disease; antidepressant;
hypertension; cardiac; depression; probe; sequencing primer; PCR primer;
PCR primer universal tail.

Homo sapiens.

WO200185742-A2.

15-NOV-2001.

07-MAY-2001; 2001WO-US014773.

05-MAY-2000; 2000US-0201950P.

(GENA-) GENAISSANCE PHARM INC.

Choi JY, Kliem SE, Koshiy B, Lee HH;

WPI; 2002-055579/07.

New isolated polynucleotide variant of neuropeptide Y receptor Y1 (NPY1R) for studying the function of NPY1R, and expressing NPY1R protein for use in screening candidate drugs to treat NPY1R-related diseases.

Claim 17; Page 12; 48pp; English.

The invention relates to single nucleotide polymorphisms in the human neuropeptide Y receptor Y1 (NPY1R) gene. A method for haplotyping the NPY1R gene in an individual comprises identifying the nucleotide at one or more polymorphic sites and determining whether one of the copies of the gene is defined by one of the NPY1R haplotypes given in the specification or whether both copies are defined by a haplotype pair.

This method is useful in genotyping, whereby all possible haplotype pairs can be assigned to specific genotypes. An association between a trait and a haplotype or haplotype pair of the NPY1R gene can be identified by comparing the frequency of the haplotype or haplotype pair in a population exhibiting the trait with the frequency of the haplotype or haplotype pair in a reference population, where a higher haplotype frequency in the trait population indicates the trait is associated with the haplotype or haplotype pair. NPY1R and its corresponding DNA are used for studying the expression and function of NPY1R, for use in screening for candidate drugs to treat diseases related to NPY1R activity, such as cardiovascular diseases (e.g. hypertension) and depression. The sequences are also useful for studying the effect of variation on the biological activity of NPY1R as well as on the binding affinity of candidate drugs targeting NPY1R. Sequences AAS95637-AAS95659 represent allele-specific oligonucleotide probes, sequencing primers, PCR primers and PCR primer universal tails used to detect NPY1R gene polymorphisms

Sequence 10 BP; 6 A; 1 C; 3 G; 0 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 10;
Best Local Similarity 100.0%; Pred. No. 8.9e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 918 TCTTGCCTT 927
| | | | |
DB 10 TCTTGCCTT 1

RESULT 655

ABK55553

ID ABK55553 standard; DNA; 10 BP.

AC ABK55553;

18-JUN-2002 (first entry)

Selectin L Lymphocyte Adhesion Molecule 1 (SELL) oligonucleotide #89.

Human; Selectin L Lymphocyte Adhesion Molecule 1; SELL;
neonatal pertussis; whooping cough; haplotyping; primer;
allele-specific oligonucleotide; ss.

Homo sapiens.

WO200216654-A1.

28-FEB-2002.

27-AUG-2001; 2001WO-US026675.

25-AUG-2000; 2000US-0228262P.

(GENA-) GENAISSANCE PHARM INC.

Anastasio AE, Bieglecki KM, Kliem SE, Koshiy B, Kumar AM;

WPI; 2002-292071/33.

Novel genetic variants of selectin L lymphocyte adhesion molecule 1 (SELL) gene useful for therapeutic purposes and for expressing SELL protein useful in identifying drugs to treat whooping cough.

Claim 19; Page 15; 137pp; English.

The invention relates to an isolated polynucleotide (I) comprising a nucleotide sequence which is a polymorphic variant of a reference sequence for Selectin L Lymphocyte Adhesion Molecule 1 (SELL) gene. SELL polypeptide is useful for screening for drugs targeting the polypeptide. Oligonucleotides derived from (I) are used to target SELL and a haplotype or haplotype pair of SELL gene. These are useful in developing diagnostic tests and therapeutic treatments for neonatal pertussis (whooping cough). (I) is useful for studying the expression and function of SELL and expressing SELL protein for use in screening for candidate drugs to treat

CC diseases related to SELL activity. The polymorphism and haplotype data
 CC are useful for validating whether SELL is a suitable target for drugs to
 CC treat whooping cough, screening for such drugs and reducing bias in
 CC clinical trials of such drugs. Establishing the SELL haplotype or
 CC haplotype pair of an individual is useful for improving the efficiency
 CC and reliability of several steps in the discovery and development of
 CC drugs for treating diseases associated with SELL activity e.g. neonatal
 CC pertussis (whooping cough). The haplotyping method is useful to validate
 CC SELL as a candidate target for treating a specific condition or disease
 CC predicted to be associated with SELL activity. The method is also useful
 CC in screening for compounds targeting SELL to treat a specific condition
 CC or disease predicted to be associated with SELL activity, e.g. detecting
 CC which of the SELL haplotypes or haplotype pairs present in individual
 CC members of a population with the specific disease of interest enables one
 CC to screen for compounds that display the highest desired agonist or
 CC antagonist activity for each of the most frequent SELL isoforms present
 CC in the disease population. A polymorphic variant of SELL is useful in
 CC studying the effect of the variation on the biological activity of SELL,
 CC on the binding affinity of candidate drugs targeting SELL for the
 CC treatment of neonatal pertussis (whooping cough) and in assays to measure
 CC the binding affinities of one or more candidate drugs targeting the SELL
 CC protein. ABK5465-ABK5559 represent SELL gene allele-specific
 CC oligonucleotides of the invention

XX Sequence 10 BP; 1 A; 2 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 10;
 Best Local Similarity 100.0%; Pred. No. 8.9e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

CY 901 CTGTCATT 910
 |||||
 Db 1 CTGTCATT 10

RESULT 656
 ABV63191/c

ID ABV63191 standard; cDNA; 11 BP.

AC ABV63191;

DT 21-OCT-2002 (first entry)

DE Human skin EST 977.

FW Human; skin; dermatological; vulnary; antipsoriatic; antisborrhaeic;
 KW immunosuppressive; antiinflammatory; cytostatic; SAGE; neurodermatitis;
 KW psoriasis; dermatitis; skin cancer; EST; expressed sequence tag; ss.

XX Homo sapiens.

CS WO200253774-A2.

FN 11-JUL-2002.

PF 20-DEC-2001; 2001WO-EP015179.

PR 03-JAN-2001; 2001DE-01000127.

XX (HENK) HENKEL KGAA.

PI Petersohn D, Conradt M, Hofmann K;

XX WPI; 2002-590638/63.

XX In vitro identification of skin-expressed genes, useful for determining
 PT homeostasis and identifying cosmetic or pharmaceutical agents against
 PT e.g. skin cancer.

PS Disclosure, Page 52; 1345pp; German.

XX The invention relates to in vitro identification (M1) of genes expressed
 CC in the skin of humans or animals by subjecting a mixture of genetically

CC encoded factors from skin, to serial analysis of gene expression (SAGE)
 CC so as to identify skin-expressed genes and quantify their expression.
 CC (M1) is useful for identifying genes involved in skin homeostasis; to
 CC determine skin homeostasis and to test agent (A) that maintains or
 CC promotes skin homeostasis or that can be used for treating skin
 CC disorders, specifically neurodermatitis; sunburn; psoriasis; scleroderma;
 CC ichthyosis; atopic dermatitis; acne; seborrhea; lupus erythematosus;
 CC rosacea; melanoma; basal cell carcinoma; and carcinoma or sarcoma of the
 CC skin. The present sequence is that of a human expressed sequence tag
 CC (EST) of the invention

XX Sequence 11 BP; 6 A; 2 C; 3 G; 0 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 11;
 Best Local Similarity 100.0%; Pred. No. 9.5e+02;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

CY 910 TTCTTTGGTC 919
 |||||
 Db 10 TTCTTTGGTC 1

RESULT 657
 ABV70612/c

ID ABV70612 standard; cDNA; 11 BP.

AC ABV70612;

DT 21-OCT-2002 (first entry)

DE Human skin EST 8398.

FW Human; skin; dermatological; vulnary; antipsoriatic; antisborrhaeic;
 KW immunosuppressive; antiinflammatory; cytostatic; SAGE; neurodermatitis;
 KW psoriasis; dermatitis; skin cancer; EST; expressed sequence tag; ss.

XX Homo sapiens.

PN WO200253774-A2.

XX 11-JUL-2002.

PF 20-DEC-2001; 2001WO-EP015179.

PR 03-JAN-2001; 2001DE-01000127.

XX (HENK) HENKEL KGAA.

PI Petersohn D, Conradt M, Hofmann K;

XX WPI; 2002-590638/63.

XX In vitro identification of skin-expressed genes, useful for determining
 PT homeostasis and identifying cosmetic or pharmaceutical agents against
 PT e.g. skin cancer.

PS Claim 24; Page 268; 1345pp; German.

XX The invention relates to in vitro identification (M1) of genes expressed
 CC in the skin of humans or animals by subjecting a mixture of genetically
 CC encoded factors from skin, to serial analysis of gene expression (SAGE)
 CC so as to identify skin-expressed genes and quantify their expression.
 CC (M1) is useful for identifying genes involved in skin homeostasis; to
 CC determine skin homeostasis and to test agent (A) that maintains or
 CC promotes skin homeostasis or that can be used for treating skin
 CC disorders, specifically neurodermatitis; sunburn; psoriasis; scleroderma;
 CC ichthyosis; atopic dermatitis; acne; seborrhea; lupus erythematosus;
 CC rosacea; melanoma; basal cell carcinoma; and carcinoma or sarcoma of the
 CC skin. The present sequence is that of a human expressed sequence tag
 CC (EST) of the invention

XX Sequence 11 BP; 6 A; 2 C; 3 G; 0 T; 0 U; 0 Other;

```

Query Match      13.7%; Score 10; DB 1; Length 11;
Best Local Similarity 100.0%; Pred. No. 9.5e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Y 910 TTCTTTGGTC 919
b 10 TTCTTTGGTC 1

RESULT 658
BV67520
D ABV67520 standard; cDNA; 11 BP.
X C ABV67520;
X C
X T 21-OCT-2002 (first entry)
X E Human skin EST 5306.
X N Human; skin; dermatological; vulnery; antipsoriatic; antiseborrhaeic;
X M immunosuppressive; antiinflammatory; cytostatic; SAGE; neurodermatitis;
X W psoriasis; dermatitis; skin cancer; EST; expressed sequence tag; ss.
X Z Homo sapiens.
X Z WO200253774-A2.
X Z 11-JUL-2002.
X Z 20-DEC-2001; 2001WO-EP015179.
X Z 03-JAN-2001; 2001DE-01000127.
X Z (HENK ) HENKEL KGAA.
X Z Petersohn D, Conradt M, Hofmann K;
X Z WPI; 2002-590638/63.
X Z In vitro identification of skin-expressed genes, useful for determining
X Z homeostasis and identifying cosmetic or pharmaceutical agents against
X Z e.g. skin cancer.
X Z Disclosure; Page 171; 1345pp; German.
X Z The invention relates to in vitro identification (M1) of genes expressed
X Z in the skin of humans or animals by subjecting a mixture of genetically
X Z encoded factors from skin, to serial analysis of gene expression (SAGE)
X Z so as to identify skin-expressed genes and quantify their expression.
X Z (M1) is useful for identifying genes involved in skin homeostasis; to
X Z determine skin homeostasis and to test agent (A) that maintains or
X Z promotes skin homeostasis or that can be used for treating skin
X Z disorders, specifically neurodermatitis; sunburn; psoriasis; scleroderma;
X Z ichthyosis; atopic dermatitis; acne; seborrhea; lupus erythematosus;
X Z rosacea; melanoma; basal cell carcinoma; and carcinoma or sarcoma of the
X Z skin. The present sequence is that of a human expressed sequence tag
X Z (EST) of the invention
X Z Sequence 11 BP; 2 A; 2 C; 1 G; 6 T; 0 U; 0 Other;

Query Match      13.7%; Score 10; DB 1; Length 11;
Best Local Similarity 100.0%; Pred. No. 9.5e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Y 904 GTCATTTCCT 913
b 1 GTCATTTCCT 10

RESULT 659
BV67754
D ABV67754 standard; cDNA; 11 BP.
X C
X C
X T 30-MAY-2002 (first entry)
X E Human Pan-Endothelial Marker SEQ ID NO 81.
X N Human; mouse; rat; TEM; tumour endothelial marker; NEM; PEM; cytostatic;
X M normal endothelial marker; pan-endothelial marker; immunostimulant;
X W antiangiogenic; tumour; neoangiogenesis; vascularised tumour;
X Z polycystic kidney disease; diabetes; retinopathy; rheumatoid arthritis;
X Z psoriasis; ss.
X Z Homo sapiens.

```

```

AC ABV67754;
XX 21-OCT-2002 (first entry)
XX Human skin EST 5540.
XX Human; skin; dermatological; vulnery; antipsoriatic; antiseborrhaeic;
XX immunosuppressive; antiinflammatory; cytostatic; SAGE; neurodermatitis;
XX psoriasis; dermatitis; skin cancer; EST; expressed sequence tag; ss.
XX Homo sapiens.
XX WO200253774-A2.
XX 11-JUL-2002.
XX 20-DEC-2001; 2001WO-EP015179.
XX 03-JAN-2001; 2001DE-01000127.
XX (HENK ) HENKEL KGAA.
XX Petersohn D, Conradt M, Hofmann K;
XX WPI; 2002-590638/63.
XX In vitro identification of skin-expressed genes, useful for determining
XX homeostasis and identifying cosmetic or pharmaceutical agents against
XX e.g. skin cancer.
XX Disclosure; Page 178; 1345pp; German.
XX The invention relates to in vitro identification (M1) of genes expressed
XX in the skin of humans or animals by subjecting a mixture of genetically
XX encoded factors from skin, to serial analysis of gene expression (SAGE)
XX so as to identify skin-expressed genes and quantify their expression.
XX (M1) is useful for identifying genes involved in skin homeostasis; to
XX determine skin homeostasis and to test agent (A) that maintains or
XX promotes skin homeostasis or that can be used for treating skin
XX disorders, specifically neurodermatitis; sunburn; psoriasis; scleroderma;
XX ichthyosis; atopic dermatitis; acne; seborrhea; lupus erythematosus;
XX rosacea; melanoma; basal cell carcinoma; and carcinoma or sarcoma of the
XX skin. The present sequence is that of a human expressed sequence tag
XX (EST) of the invention
XX Sequence 11 BP; 0 A; 1 C; 2 G; 8 T; 0 U; 0 Other;

Query Match      13.7%; Score 10; DB 1; Length 11;
Best Local Similarity 100.0%; Pred. No. 9.5e+02;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 913 TTTGGTCCTTT 922
Db 1 TTTGGTCCTTT 10

RESULT 660
ABL91983
ID ABL91983 standard; cDNA; 11 BP.
XX ABL91983;
XX 30-MAY-2002 (first entry)
XX Human Pan-Endothelial Marker SEQ ID NO 81.
XX Human; mouse; rat; TEM; tumour endothelial marker; NEM; PEM; cytostatic;
XX normal endothelial marker; pan-endothelial marker; immunostimulant;
XX antiangiogenic; tumour; neoangiogenesis; vascularised tumour;
XX polycystic kidney disease; diabetes; retinopathy; rheumatoid arthritis;
XX psoriasis; ss.
XX Homo sapiens.

```



```

2 26-AUG-1992; 92US-00936422.
3 26-AUG-1992; 92US-00936531.
4 26-AUG-1992; 92US-00936532.
5 07-DEC-1992; 92US-00987131.
6 19-JAN-1993; 93US-00006122.
7 19-JAN-1993; 93US-00008910.
8 (RIBO-) RIBOZYME PHARM INC.
9 Thompson JD, Draper KG;
10 WPI; 1993-386203/48.
11 New enzymatic RNA molecules (ribozymes) - which cleave mRNA associated
12 with tumours or mRNA expressed from gene encoding multiple drug
13 resistance.
14 Claim 3; Fig 3; 69pp; English.
15 The sequences given in AAQ51825-2266 represent areas of mRNAs associated
16 with development or maintenance of chronic myelogenous leukemia (CML),
17 promyelocytic leukemia, Burkitt's lymphoma, or acute lymphocytic
18 leukemia, follicular lymphoma, B-cell acute lymphocytic leukemia, breast
19 cancer, colon carcinoma, neuroblastoma and lung cancer. The full length
20 mRNAs containing these target sequences, encode aberrant cellular proteins
21 which are able to control cellular proliferation and are directly linked
22 to a leukemic phenotype. These target sequences are identified by the
23 ribozyme of the invention. The ribozymes are formed in a hammerhead motif,
24 but may also be formed in the motif of a hairpin, hepatitis delta virus,
25 group I intron or RNaseP-like RNA. These ribozymes may be used to inhibit
26 the development or expression of a transformed phenotype in man and other
27 animals by modulating expression of the corresponding gene. Cleavage of
28 target mRNAs expressed in pre-neoplastic and transformed cells elicits
29 inhibition of the transformed state. Multiple drug resistance (mdr-1)
30 mRNA specific ribozymes remove the mechanism of drug resistance used by
31 transformed cells and thus enhances drug therapies for tumours. The
32 ribozymes may also be used to study genetic drift and mutations within
33 cells. (Updated on 25-MAR-2003 to correct PN field.)
34 Sequence 12 BP; 5 A; 4 C; 2 G; 0 T; 1 U; 0 Other;
35
36 Query Match 13.7%; Score 10; DB 1; Length 12;
37 Best Local Similarity 100.0%; Pred. NO. 1e+03;
38 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
39
40 903 GGTCATTTC 912
41 |||||
42 10 GGTCATTTC 1
43
44 .SULT 663
45 A06762
46 AAA06762 standard; DNA; 12 BP.
47
48 AAA06762;
49
50 05-JUN-2000 (first entry)
51 VEGF derived short antisense oligonucleotide SEQ ID NO:71.
52
53 Human; vascular endothelial growth factor; VEGF; phosphorothioate;
54 antisense oligonucleotide; inhibition; cytostatic; angiogenic;
55 gene therapy; abnormal vascular permeability; cell proliferation;
56 cell permeation; angiogenesis; neovascularisation; tumour cell growth;
57 metastasis; ss.
58
59 Homo sapiens.
60 Synthetic.
61 EP979869-A1.
62 16-FEB-2000.
63
64 PF 07-AUG-1998; 98EP-00114853.
65 XX
66 PR 07-AUG-1998; 98EP-00114853.
67 XX
68 XX (HMRI ) HOECHST MARION ROUSSEL DEUT GMBH.
69 PA
70 XX Uhlmann E, Peyman A, Bitonti AJ, Woessner RD;
71 PI WPI; 2000-258586/23.
72 XX
73 DR
74 XX Novel oligonucleotides corresponding to a part of a vascular endothelial
75 growth factor, useful for treating e.g. tumor cell growth and/or
76 metastasis.
77 PT
78 XX Example 1; Page 17; 73pp; English.
79 XX
80 CC The present invention describes oligonucleotides (I) of 10-15 residues
81 corresponding to a part of a vascular endothelial growth factor (VEGF)
82 comprising 1 of 6 sequences given in AAA06692 to AAA06697. AAA06698 to
83 AAA06783 represent VEGF antisense oligonucleotides used in the
84 exemplification of the present invention. The antisense oligonucleotides
85 can contain phosphorothioate linkages. Oligonucleotides from the present
86 invention have cytostatic and angiogenic activities, and can be used in
87 gene therapy. The oligonucleotides are useful for inhibiting the
88 expression of VEGF, e.g. for the treatment of diseases associated with
89 abnormal vascular permeability, cell proliferation, cell permeation,
90 angiogenesis, neovascularisation, tumour cell growth and/or metastasis.
91 CC AAA06784 represents a human VEGF nucleotide sequence from which the
92 oligonucleotides are derived
93 XX
94 SQ Sequence 12 BP; 0 A; 3 C; 3 G; 6 T; 0 U; 0 Other;
95
96 Query Match 13.7%; Score 10; DB 1; Length 12;
97 Best Local Similarity 100.0%; Pred. NO. 1e+03;
98 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
99
100 QY 911 TCTTTGGTCT 920
101 |||||
102 1 TCTTTGGTCT 10
103
104 Db
105
106 RESULT 664
107 ABI23392/c
108 ID ABI23392 standard; DNA; 12 BP.
109 XX
110 AC ABI23392;
111 XX
112 XX 22-FEB-2002 (first entry)
113 XX
114 DE Oligonucleotide primer SEQ ID NO 323365 for detecting SNP TSC0031356.
115 XX
116 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
117 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
118 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
119 XX
120 OS Homo sapiens.
121 XX
122 PN WO200177384-A2.
123 XX
124 PD 18-OCT-2001.
125 XX
126 PF 06-APR-2001; 2001WO-IB000713.
127 XX
128 PR 07-APR-2000; 2000DE-01019173.
129 XX
130 PA (EPIG-) EPIGENOMICS AG.
131 XX
132 PI Olek A, Piepenbrock C, Berlin K;
133 XX WPI; 2001-657177/75.
134 DR
135 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
136 PT designed to detect single-nucleotide polymorphisms and cytosine

```


PT methylation status.
XX
PS Claim 1; SEQ ID NO 32365; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 12 BP; 4 A; 0 C; 8 G; 0 T; 0 U; 0 Other;
Query Match 13.7%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 932 CCTCTCTCTT 941
DQ 10 CCTCTCTCTT 1
RESULT 665
ABI26795
ID ABI26795 standard; DNA; 12 BP.
AC ABI26795;
XX
XX 22-FEB-2002 (first entry)
DT
DE Oligonucleotide primer SEQ ID NO 326768 for detecting SNP TSC0033271.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
XX
XX Claim 1; SEQ ID NO 326768; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 12 BP; 4 A; 0 C; 8 G; 0 T; 0 U; 0 Other;
Query Match 13.7%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 932 CCTCTCTCTT 941
DQ 10 CCTCTCTCTT 1
RESULT 665
ABI26795
ID ABI26795 standard; DNA; 12 BP.
AC ABI26795;
XX
XX 22-FEB-2002 (first entry)
DT
DE Oligonucleotide primer SEQ ID NO 326768 for detecting SNP TSC0033271.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
XX
XX Claim 1; SEQ ID NO 32365; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 12 BP; 4 A; 0 C; 8 G; 0 T; 0 U; 0 Other;
Query Match 13.7%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 932 CCTCTCTCTT 941
DQ 10 CCTCTCTCTT 1
RESULT 665
ABI26795
ID ABI26795 standard; DNA; 12 BP.
AC ABI26795;
XX
XX 22-FEB-2002 (first entry)
DT
DE Oligonucleotide primer SEQ ID NO 297135 for detecting SNP TSC0017438.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
XX
XX Claim 1; SEQ ID NO 297135; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 12 BP; 2 A; 1 C; 6 G; 3 T; 0 U; 0 Other;
Query Match 13.7%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 958 CGCTACCAAC 967
DQ 10 CGCTACCAAC 1

CC data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 12 BP; 3 A; 0 C; 1 G; 8 T; 0 U; 0 Other;
Query Match 13.7%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 948 TTTAATGTAT 957
DQ 2 TTTAATGTAT 11
RESULT 666
ABH97142/C
ID ABH97142 standard; DNA; 12 BP.
AC ABH97142;
XX
XX 22-FEB-2002 (first entry)
DT
DE Oligonucleotide primer SEQ ID NO 297135 for detecting SNP TSC0017438.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
XX
XX Claim 1; SEQ ID NO 297135; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 12 BP; 2 A; 1 C; 6 G; 3 T; 0 U; 0 Other;
Query Match 13.7%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 958 CGCTACCAAC 967
DQ 10 CGCTACCAAC 1

```
3SULT 667
3I25204/c
3ABI25204 standard; DNA; 12 BP.
3
3ABI25204;
3
322-FEB-2002 (first entry)
3
3Oligonucleotide primer SEQ ID NO 325177 for detecting SNP TSC0032436.
3
3SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
3peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
3central nervous system; gastrointestinal; respiratory; immune; metabolic.
3
3Homo sapiens.
3
3WO200177384-A2.
3
318-OCT-2001.
3
306-APR-2001; 2001WO-IB000713.
3
307-APR-2000; 2000DE-01019173.
3
3(EPIG-) EPIGENOMICS AG.
3
3Olek A, Piepenbrock C, Berlin K;
3
3WPI; 2001-657177/75.
3
3Set of oligonucleotides, useful for diagnosis and cell typing, is
3designed to detect single-nucleotide polymorphisms and cytosine
3methylation status.
3
3Claim 1; SEQ ID NO 325177; 29pp + Sequence Listing; German.
3
3This invention describes novel oligonucleotide primers or peptide nucleic
3acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
3and cytosine methylation status in chemically pretreated genomic DNA. The
3oligonucleotides are used for diagnosis and/or prognosis of cancer and a
3range of diseases including immune system, gastrointestinal, respiratory,
3central nervous system, cardiovascular and metabolic disorders. The
3oligonucleotides are also used for detecting cell type differentiation. ABC00010
3-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
3represent the oligomers described in the invention. NOTE: The sequence
3data for this patent did not form part of the printed specification, but
3was obtained in electronic format from WIPO at
3ftp.wipo.int/pub/published_pct_sequences
3
3Sequence 12 BP; 7 A; 3 C; 0 G; 2 T; 0 U; 0 Other;
3
3Query Match 13.7%; Score 10; DB 1; Length 12;
3Best Local Similarity 100.0%; Pred. No. 1e+03;
3Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
3
3944 TTGGTTTAAAT 953
3|||||||
310 TTGGTTTAAAT 1
3
3SULT 668
3H77932/c
3ABH77932 standard; DNA; 12 BP.
3
3ABH77932;
3
322-FEB-2002 (first entry)
3
3Oligonucleotide primer SEQ ID NO 277925 for detecting SNP TSC0005255.
3
3SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
```

```
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 277925; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 12 BP; 6 A; 3 C; 0 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 13.7%; Score 10; DB 1; Length 12;
XX Best Local Similarity 100.0%; Pred. No. 1e+03;
XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 944 TTGGTTTAAAT 953
XX Db 11 TTGGTTTAAAT 2
XX
XX RESULT 669
XX ABH93406/c
XX ID ABH93406 standard; DNA; 12 BP.
XX
XX AC ABH93406;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide primer SEQ ID NO 293399 for detecting SNP TSC0015594.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
```

PA (BPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 293399; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX Sequence 12 BP; 5 A; 5 C; 0 G; 2 T; 0 U; 0 Other;
 XX
 XX Query Match 13.7%; Score 10; DB 1; Length 12;
 XX Best Local Similarity 100.0%; Pred. No. 1e+03;
 XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 945 TGGTTTAATG 954
 DB 11 TGGTTTAATG 2
 RESULT 670
 ABI36751
 ID ABI36751 standard; DNA; 12 BP.
 AC ABI36751;
 XX 22-FEB-2002 (first entry)
 XX Oligonucleotide primer SEQ ID NO 336724 for detecting SNP TSC0008903.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 CS WO200177384-A2.
 XX 18-OCT-2001.
 XX 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (BPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 336724; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic

CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX Sequence 12 BP; 4 A; 0 C; 1 G; 7 T; 0 U; 0 Other;
 XX
 XX Query Match 13.7%; Score 10; DB 1; Length 12;
 XX Best Local Similarity 100.0%; Pred. No. 1e+03;
 XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 948 TTTAATGTAT 957
 DB 2 TTTAATGTAT 11
 RESULT 671
 ABH67436
 ID ABH67436 standard; DNA; 12 BP.
 XX ABH67436;
 XX 22-FEB-2002 (first entry)
 XX Oligonucleotide primer SEQ ID NO 267413 for detecting SNP TSC0000187.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 OS WO200177384-A2.
 XX 18-OCT-2001.
 XX 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (BPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 267413; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX Sequence 12 BP; 2 A; 3 C; 0 G; 7 T; 0 U; 0 Other;

```

Query Match          13.7%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

/ 905 TCATTTTCTT 914
) 3 TCATTTTCTT 12
|||||
|||||

RESULT 672
3H79193/C
) ABH79193 standard; DNA; 12 BP.
) ABH79193;
) 22-FEB-2002 (first entry)
) Oligonucleotide primer SEQ ID NO 279186 for detecting SNP TSC0007021.
) SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
) peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
) central nervous system; gastrointestinal; respiratory; immune; metabolic.
) Homo sapiens.
) WO200177384-A2.
) 18-OCT-2001.
) 06-APR-2001; 2001WO-IB000713.
) 07-APR-2000; 2000DE-01019173.
) (EPIG-) EPIGENOMICS AG.
) Olek A, Piepenbrock C, Berlin K;
) WPI; 2001-657177/75.
) Set of oligonucleotides, useful for diagnosis and cell typing, is
) designed to detect single-nucleotide polymorphisms and cytosine
) methylation status.
) Claim 1; SEQ ID NO 279186; 29pp + Sequence Listing; German.
) This invention describes novel oligonucleotide primers or peptide nucleic
) acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
) and cytosine methylation status in chemically pretreated genomic DNA. The
) oligonucleotides are used for diagnosis and/or prognosis of cancer and a
) range of diseases including immune system, gastrointestinal, respiratory,
) central nervous system, cardiovascular and metabolic disorders. The
) oligomers are also used for detecting cell type differentiation. ABC00010
) -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
) represent the oligomers described in the invention. NOTE: The sequence
) data for this patent did not form part of the printed specification, but
) was obtained in electronic format from WIPO at
) ftp.wipo.int/pub/published_pct_sequences
) Sequence 12 BP; 5 A; 0 C; 5 G; 2 T; 0 U; 0 Other;
) This invention describes novel oligonucleotide primers or peptide nucleic
) acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
) and cytosine methylation status in chemically pretreated genomic DNA. The
) oligonucleotides are used for diagnosis and/or prognosis of cancer and a
) range of diseases including immune system, gastrointestinal, respiratory,
) central nervous system, cardiovascular and metabolic disorders. The
) oligomers are also used for detecting cell type differentiation. ABC00010
) -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
) represent the oligomers described in the invention. NOTE: The sequence
) data for this patent did not form part of the printed specification, but
) was obtained in electronic format from WIPO at
) ftp.wipo.int/pub/published_pct_sequences
) Sequence 12 BP; 5 A; 0 C; 5 G; 2 T; 0 U; 0 Other;

Query Match          13.7%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

935 TCCTCTTCAT 944
11 TCCTCTTCAT 2
|||||
|||||

RESULT 673
3H79668/C
) ABH79668 standard; DNA; 12 BP.

```

```

XX ABH79668;
XX AC
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide primer SEQ ID NO 279661 for detecting SNP TSC0007676.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 279661; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX Sequence 12 BP; 8 A; 1 C; 0 G; 3 T; 0 U; 0 Other;
XX
XX Query Match          13.7%; Score 10; DB 1; Length 12;
XX Best Local Similarity 100.0%; Pred. No. 1e+03;
XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 948 TTTAATGTAT 957
XX |||||
XX 12 TTTAATGTAT 3
XX
XX RESULT 674
XX ABH81178
XX ID ABH81178 standard; DNA; 12 BP.
XX
XX ABH81178;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide primer SEQ ID NO 281171 for detecting SNP TSC0009505.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX

```

EN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 PR 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 281171; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 12 BP; 1 A; 5 C; 0 G; 6 T; 0 U; 0 Other;
 Query Match 13.7%; Score 10; DB 1; Length 12;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 927 TTTATCCCTC 936
 DB 1 TTTATCCCTC 10
 |||||
 |||||
 RESULT 675
 ABI52939/c
 ID ABI52939 standard; DNA; 12 BP.
 AC ABI52939;
 XX
 DT 22-FEB-2002 (first entry)
 XX
 DE Oligonucleotide primer SEQ ID NO 352912 for detecting SNP TSC0048171.
 XX
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 PR 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 352912; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 12 BP; 1 A; 5 C; 0 G; 6 T; 0 U; 0 Other;
 Query Match 13.7%; Score 10; DB 1; Length 12;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 927 TTTATCCCTC 936
 DB 1 TTTATCCCTC 10
 |||||
 |||||
 RESULT 675
 ABI52939/c
 ID ABI52939 standard; DNA; 12 BP.
 AC ABI52939;
 XX
 DT 22-FEB-2002 (first entry)
 XX
 DE Oligonucleotide primer SEQ ID NO 352912 for detecting SNP TSC0048171.
 XX
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 PR 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX

XX
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 352912; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 12 BP; 7 A; 0 C; 2 G; 3 T; 0 U; 0 Other;
 Query Match 13.7%; Score 10; DB 1; Length 12;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 905 TCATTTCCTT 914
 DB 10 TCATTTCCTT 1
 |||||
 |||||
 RESULT 676
 ABI71569/c
 ID ABI71569 standard; DNA; 12 BP.
 AC ABI71569;
 XX
 DT 22-FEB-2002 (first entry)
 XX
 DE Oligonucleotide primer SEQ ID NO 371542 for detecting SNP TSC0058846.
 XX
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 PR 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 371542; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The

oligomers are also used for detecting cell type differentiation. ABC00010
-ABCF9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 12 BP; 8 A; 0 C; 2 G; 2 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1e+03; Indels 0; Gaps 0;
Matches 10; Conservative 0; Mismatches 0;

906 CATTTCCTTT 915
12 CATTTCCTTT 3

RESULT 677

ABH93598 standard; DNA; 12 BP.

ABH93598;

22-FEB-2002 (first entry)

Oligonucleotide primer SEQ ID NO 293591 for detecting SNP TSC0015696.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPITG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.

Claim 1; SEQ ID NO 293591; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABCF9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 12 BP; 3 A; 0 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1e+03; Indels 0; Gaps 0;
Matches 10; Conservative 0; Mismatches 0;

945 TGGTTTAATG 954
1 TGGTTTAATG 10

RESULT 678

ABH94275/c
ABH94275 standard; DNA; 12 BP.

ABH94275;

22-FEB-2002 (first entry)

Oligonucleotide primer SEQ ID NO 294268 for detecting SNP TSC0015029.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPITG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.

Claim 1; SEQ ID NO 294268; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABCF9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 12 BP; 6 A; 3 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1e+03; Indels 0; Gaps 0;
Matches 10; Conservative 0; Mismatches 0;

946 GGTTTAATGT 955
11 GGTTTAATGT 2

RESULT 679

ABH98673/c
ABH98673 standard; DNA; 12 BP.

ABH98673;

22-FEB-2002 (first entry)

XX

```

DE Oligonucleotide primer SEQ ID NO 298666 for detecting SNP TSC0018226.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
OS Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 298666; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 12 BP; 7 A; 2 C; 0 G; 3 T; 0 U; 0 Other;
Query Match 13.7%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 944 TTGGTTTAAAT 953
DB 11 TTGGTTTAAAT 2

RESULT 680
ABI34373
ID ABI34373 standard; DNA; 12 BP.
XX ABI34373;
XX 22-FEB-2002 (first entry)
XX Oligonucleotide primer SEQ ID NO 334346 for detecting SNP TSC0038098.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.

```

```

XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 334346; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 12 BP; 2 A; 4 C; 0 G; 6 T; 0 U; 0 Other;
Query Match 13.7%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 936 CCTCTTCATT 945
DB 3 CCTCTTCATT 12

RESULT 681
ABH99898/c
ID ABH99898 standard; DNA; 12 BP.
XX ABH99898;
XX 22-FEB-2002 (first entry)
XX Oligonucleotide primer SEQ ID NO 299891 for detecting SNP TSC0018796.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX

```

```

1 Claim 1; SEQ ID NO 299891; 29pp + Sequence Listing; German.
2
3 This invention describes novel oligonucleotide primers or peptide nucleic
4 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
5 and cytosine methylation status in chemically pretreated genomic DNA. The
6 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
7 range of diseases including immune system, gastrointestinal, respiratory,
8 central nervous system, cardiovascular and metabolic disorders. The
9 oligomers are also used for detecting cell type differentiation. ABC00010
10 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
11 represent the oligomers described in the invention. NOTE: The sequence
12 data for this patent did not form part of the printed specification, but
13 was obtained in electronic format from WIPO at
14 ftp.wipo.int/pub/published_pct_sequences
15
16 Sequence 12 BP; 5 A; 0 C; 6 G; 1 T; 0 U; 0 Other;
17
18 Query Match 13.7%; Score 10; DB 1; Length 12;
19 Best Local Similarity 100.0%; Pred. No. 1e+03;
20 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
21
22 931 TCCCTCCTCT 940
23 12 TCCCTCCTCT 3
24
25 RESULT 682
26 3168853
27 ABI68853 standard; DNA; 12 BP.
28
29 ABI68853;
30
31 22-FEB-2002 (first entry)
32
33 Oligonucleotide primer SEQ ID NO 368826 for detecting SNP TSC0057250.
34
35 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
36 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
37 central nervous system; gastrointestinal; respiratory; immune; metabolic.
38
39 Homo sapiens.
40
41 WO200177384-A2.
42
43 18-OCT-2001.
44
45 06-APR-2001; 2001WO-IB0000713.
46
47 07-APR-2000; 2000DE-01019173.
48
49 (EPIG-) EPIGENOMICS AG.
50
51 Olek A, Piepenbrock C, Berlin K;
52
53 WPI; 2001-657177/75.
54
55 Set of oligonucleotides, useful for diagnosis and cell typing, is
56 designed to detect single-nucleotide polymorphisms and cytosine
57 methylation status.
58
59 Claim 1; SEQ ID NO 368826; 29pp + Sequence Listing; German.
60
61 This invention describes novel oligonucleotide primers or peptide nucleic
62 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
63 and cytosine methylation status in chemically pretreated genomic DNA. The
64 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
65 range of diseases including immune system, gastrointestinal, respiratory,
66 central nervous system, cardiovascular and metabolic disorders. The
67 oligomers are also used for detecting cell type differentiation. ABC00010
68 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
69 represent the oligomers described in the invention. NOTE: The sequence
70 data for this patent did not form part of the printed specification, but
71 was obtained in electronic format from WIPO at
72 ftp.wipo.int/pub/published_pct_sequences
73
74 Sequence 12 BP; 5 A; 0 C; 6 G; 1 T; 0 U; 0 Other;
75
76 Query Match 13.7%; Score 10; DB 1; Length 12;
77 Best Local Similarity 100.0%; Pred. No. 1e+03;
78 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
79
80 931 TCCCTCCTCT 940
81 12 TCCCTCCTCT 3
82
83 RESULT 683
84 ABI66318/C
85 ID ABI66318 standard; DNA; 12 BP.
86
87 AC ABI66318;
88
89 22-FEB-2002 (first entry)
90
91 Oligonucleotide primer SEQ ID NO 366291 for detecting SNP TSC0004626.
92
93 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
94 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
95 central nervous system; gastrointestinal; respiratory; immune; metabolic.
96
97 Homo sapiens.
98
99 WO200177384-A2.
100
101 18-OCT-2001.
102
103 06-APR-2001; 2001WO-IB0000713.
104
105 07-APR-2000; 2000DE-01019173.
106
107 (EPIG-) EPIGENOMICS AG.
108
109 Olek A, Piepenbrock C, Berlin K;
110
111 WPI; 2001-657177/75.
112
113 Set of oligonucleotides, useful for diagnosis and cell typing, is
114 designed to detect single-nucleotide polymorphisms and cytosine
115 methylation status.
116
117 Claim 1; SEQ ID NO 366291; 29pp + Sequence Listing; German.
118
119 This invention describes novel oligonucleotide primers or peptide nucleic
120 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
121 and cytosine methylation status in chemically pretreated genomic DNA. The
122 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
123 range of diseases including immune system, gastrointestinal, respiratory,
124 central nervous system, cardiovascular and metabolic disorders. The
125 oligomers are also used for detecting cell type differentiation. ABC00010
126 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
127 represent the oligomers described in the invention. NOTE: The sequence
128 data for this patent did not form part of the printed specification, but
129 was obtained in electronic format from WIPO at
130 ftp.wipo.int/pub/published_pct_sequences
131
132 Sequence 12 BP; 8 A; 0 C; 3 G; 1 T; 0 U; 0 Other;
133
134 Query Match 13.7%; Score 10; DB 1; Length 12;
135 Best Local Similarity 100.0%; Pred. No. 1e+03;
136 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
137
138 926 TTTATCCCT 935
139 10 TTTATCCCT 1
140
141 Db
```


Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 333989; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 12 BP; 6 A; 2 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1e+03; Mismatches 0; Gaps 0;
Matches 10; Conservative 0; Indels 0;

944 TTGGTTTAAT 953

|||||
12 TTGGTTTAAT 3

RESULT 687

ABI51574/c

ABI51574 standard; DNA; 12 BP.

ABI51574;

22-FEB-2002 (first entry)

Oligonucleotide primer SEQ ID NO 351547 for detecting SNP TSC0047371.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 351547; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The

CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 12 BP; 6 A; 2 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1e+03; Mismatches 0; Gaps 0;
Matches 10; Conservative 0; Indels 0;

QY 948 TTTAATGTAT 957

|||||
12 TTTAATGTAT 3

RESULT 688

ABI81334

ID ABI81334 standard; DNA; 12 BP.

XX

AC ABI81334;

DT 22-FEB-2002 (first entry)

XX Oligonucleotide primer SEQ ID NO 381307 for detecting SNP TSC0064260.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

OS Homo sapiens.

PN WO200177384-A2.

PD 18-OCT-2001.

PF 06-APR-2001; 2001WO-IB000713.

PR 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

PI Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.

PS Claim 1; SEQ ID NO 381307; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 12 BP; 3 A; 3 C; 0 G; 6 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 12;

```
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 926 TTTTATCCCT 935
   |||||
   2 TTTTATCCCT 11

RESULT 689
ABI25221
ID ABI25221 standard; DNA; 12 BP.
AC ABI25221;
XX
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide primer SEQ ID NO 325194 for detecting SNP TSC0032450.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 325194; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 12 BP; 3 A; 2 C; 0 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 13.7%; Score 10; DB 1; Length 12;
XX Best Local Similarity 100.0%; Pred. No. 1e+03;
XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 906 CATTTTCTTT 915
   |||||
   2 CATTTTCTTT 11

RESULT 690
ABI38861
ID ABI38861 standard; DNA; 12 BP.
XX
XX ABI38861;
AC
```

```
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide primer SEQ ID NO 338834 for detecting SNP TSC0040703.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 338834; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 12 BP; 4 A; 0 C; 1 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 13.7%; Score 10; DB 1; Length 12;
XX Best Local Similarity 100.0%; Pred. No. 1e+03;
XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 948 TTTTATGTAT 957
   |||||
   1 TTTTATGTAT 10

RESULT 691
ABI59029/c
ID ABI59029 standard; DNA; 12 BP.
XX
XX ABI59029;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide primer SEQ ID NO 359002 for detecting SNP TSC0051421.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
```

```

18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 359002; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABCG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 12 BP; 4 A; 0 C; 5 G; 3 T; 0 U; 0 Other;
Query Match 13.7%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
929 TATCCCTCTCT 938
12 TATCCCTCTCT 3
|||||
359002
3163458/c
ABI63458 standard; DNA; 12 BP.
ABI63458;
22-FEB-2002 (first entry)
Oligonucleotide primer SEQ ID NO 363431 for detecting SNP TSC0053844.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 363822; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABCG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 12 BP; 7 A; 2 C; 0 G; 3 T; 0 U; 0 Other;
Query Match 13.7%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
948 TTTAATGTAT 957
11 TTTAATGTAT 2
|||||
RESULT 693
ABI63849
ID ABI63849 standard; DNA; 12 BP.
XX
AC ABI63849;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide primer SEQ ID NO 363822 for detecting SNP TSC0054076.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 363822; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABCG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 12 BP; 7 A; 2 C; 0 G; 3 T; 0 U; 0 Other;
Query Match 13.7%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
948 TTTAATGTAT 957
11 TTTAATGTAT 2
|||||

```

CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 12 BP; 2 A; 2 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 906 CATTTTCTT 915
| | | | |
Db 2 CATTTTCTT 11

RESULT 694
ABH99357
ID ABH99357 standard; DNA; 12 BP.
XX
AC ABH99357;
XX
DT 22-FEB-2002 (first entry)
XX
XX Oligonucleotide primer SEQ ID NO 299350 for detecting SNP TSC0018533.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 299350; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 12 BP; 3 A; 0 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 948 TTTAATGTAT 957
| | | | |

Db 1 TTTAATGTAT 10

RESULT 695
ABI64660/c
ID ABI64660 standard; DNA; 12 BP.
XX
XX ABI64660;
XX
DT 22-FEB-2002 (first entry)
XX
XX Oligonucleotide primer SEQ ID NO 364633 for detecting SNP TSC0005622.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 364633; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 12 BP; 8 A; 0 C; 3 G; 1 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 905 TCATTTTCTT 914
| | | | |
Db 11 TCATTTTCTT 2

RESULT 696
ABI21238/c
ID ABI21238 standard; DNA; 12 BP.
XX
XX ABI21238;
XX
DT 22-FEB-2002 (first entry)
XX
XX Oligonucleotide primer SEQ ID NO 321211 for detecting SNP TSC0030111.
XX

1 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 2 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 3 central nervous system; gastrointestinal; respiratory; immune; metabolic.
 4 Homo sapiens.
 5 WO200177384-A2.
 6 18-OCT-2001.
 7 06-APR-2001; 2001WO-IB000713.
 8 07-APR-2000; 2000DE-01019173.
 9 (EPIG-) EPIGENOMICS AG.
 10 Olek A, Piepenbrock C, Berlin K;
 11 WPI; 2001-657177/75.
 12 Set of oligonucleotides, useful for diagnosis and cell typing, is
 13 designed to detect single-nucleotide polymorphisms and cytosine
 14 methylation status.
 15 Claim 1; SEQ ID NO 321211; 29pp + Sequence Listing; German.
 16 This invention describes novel oligonucleotide primers or peptide nucleic
 17 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 18 and cytosine methylation status in chemically pretreated genomic DNA. The
 19 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 20 range of diseases including immune system, gastrointestinal, respiratory,
 21 central nervous system, cardiovascular and metabolic disorders. The
 22 oligomers are also used for detecting cell type differentiation. ABC00010
 23 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 24 represent the oligomers described in the invention. NOTE: The sequence
 25 data for this patent did not form part of the printed specification, but
 26 was obtained in electronic format from WIPO at
 27 ftp.wipo.int/pub/published_pct_sequences
 28 Sequence 12 BP; 6 A; 2 C; 0 G; 4 T; 0 U; 0 Other;
 29
 30 Query Match 13.7%; Score 10; DB 1; Length 12;
 31 Best Local Similarity 100.0%; Pred. No. 1e+03;
 32 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 33
 34 943 ATTGGTTTAA 952
 35 |||||||||
 36 10 ATTGGTTTAA 1
 37
 38 RESULT 697
 39 H146731/c
 40 ABI46731 standard; DNA; 12 BP.
 41
 42 ABI46731;
 43 22-FEB-2002 (first entry)
 44
 45 Oligonucleotide primer SEQ ID NO 346704 for detecting SNP TSC0044713.
 46 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 47 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 48 central nervous system; gastrointestinal; respiratory; immune; metabolic.
 49 Homo sapiens.
 50 WO200177384-A2.
 51 18-OCT-2001.
 52 06-APR-2001; 2001WO-IB000713.
 53 07-APR-2000; 2000DE-01019173.
 54 (EPIG-) EPIGENOMICS AG.
 55 Olek A, Piepenbrock C, Berlin K;
 56 WPI; 2001-657177/75.
 57 Set of oligonucleotides, useful for diagnosis and cell typing, is
 58 designed to detect single-nucleotide polymorphisms and cytosine
 59 methylation status.
 60 Claim 1; SEQ ID NO 349880; 29pp + Sequence Listing; German.

XX (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 XX designed to detect single-nucleotide polymorphisms and cytosine
 XX methylation status.
 XX Claim 1; SEQ ID NO 346704; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 XX and cytosine methylation status in chemically pretreated genomic DNA. The
 XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 XX range of diseases including immune system, gastrointestinal, respiratory,
 XX central nervous system, cardiovascular and metabolic disorders. The
 XX oligomers are also used for detecting cell type differentiation. ABC00010
 XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 XX represent the oligomers described in the invention. NOTE: The sequence
 XX data for this patent did not form part of the printed specification, but
 XX was obtained in electronic format from WIPO at
 XX ftp.wipo.int/pub/published_pct_sequences
 XX SQ Sequence 12 BP; 5 A; 0 C; 4 G; 3 T; 0 U; 0 Other;
 XX
 XX Query Match 13.7%; Score 10; DB 1; Length 12;
 XX Best Local Similarity 100.0%; Pred. No. 1e+03;
 XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 XX
 XX QY 927 TTTATCCCTC 936
 XX |||||||||
 XX Db 11 TTTATCCCTC 2
 XX
 XX RESULT 698
 XX ABI49907/c
 XX ID ABI49907 standard; DNA; 12 BP.
 XX
 XX AC ABI49907;
 XX XX 22-FEB-2002 (first entry)
 XX DE Oligonucleotide primer SEQ ID NO 349880 for detecting SNP TSC0046393.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 XX WO200177384-A2.
 XX 18-OCT-2001.
 XX 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 XX designed to detect single-nucleotide polymorphisms and cytosine
 XX methylation status.
 XX Claim 1; SEQ ID NO 349880; 29pp + Sequence Listing; German.

ABI26799 standard; DNA; 12 BP.
 ABI26799;
 22-FEB-2002 (first entry)
 Oligonucleotide primer SEQ ID NO 326772 for detecting SNP TSC0033272.
 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 central nervous system; gastrointestinal; respiratory; immune; metabolic.
 Homo sapiens.
 WO200177384-A2.
 18-OCT-2001.
 06-APR-2001; 2001WO-IB000713.
 07-APR-2000; 2000DE-01019173.
 (EPIG-) EPIGENOMICS AG.
 Olek A, Piepenbrock C, Berlin K;
 WPI; 2001-657177/75.
 Set of oligonucleotides, useful for diagnosis and cell typing, is
 designed to detect single-nucleotide polymorphisms and cytosine
 methylation status.
 Claim 1; SEQ ID NO 326772; 29pp + Sequence Listing; German.
 This invention describes novel oligonucleotide primers or peptide nucleic
 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 and cytosine methylation status in chemically pretreated genomic DNA. The
 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 range of diseases including immune system, gastrointestinal, respiratory,
 central nervous system, cardiovascular and metabolic disorders. The
 oligomers are also used for detecting cell type differentiation. ABC00010
 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABR00010-ABR82073
 represent the oligomers described in the invention. NOTE: The sequence
 data for this patent did not form part of the printed specification, but
 was obtained in electronic format from WIPO at
 ftp.wipo.int/pub/published_pct_sequences
 Sequence 12 BP; 3 A; 0 C; 1 G; 8 T; 0 U; 0 Other;
 This invention describes novel oligonucleotide primers or peptide nucleic
 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 and cytosine methylation status in chemically pretreated genomic DNA. The
 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 range of diseases including immune system, gastrointestinal, respiratory,
 central nervous system, cardiovascular and metabolic disorders. The
 oligomers are also used for detecting cell type differentiation. ABC00010
 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABR00010-ABR82073
 represent the oligomers described in the invention. NOTE: The sequence
 data for this patent did not form part of the printed specification, but
 was obtained in electronic format from WIPO at
 ftp.wipo.int/pub/published_pct_sequences
 Sequence 12 BP; 3 A; 0 C; 1 G; 8 T; 0 U; 0 Other;
 Query Match 13.7%; Score 10; DB 1; Length 12;
 Best Local Similarity 100.0%; Pred. NO. 1e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 948 TTTAATGAT 957
 3 TTTAATGAT 12
 SULT 702
 I56394/C
 ABI56394 standard; DNA; 12 BP.
 ABI56394;
 22-FEB-2002 (first entry)
 Oligonucleotide primer SEQ ID NO 356367 for detecting SNP TSC0009676.
 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 central nervous system; gastrointestinal; respiratory; immune; metabolic.
 Homo sapiens.

XX WO200177384-A2.
 PN 18-OCT-2001.
 PD 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 PF (EPIG-) EPIGENOMICS AG.
 PR Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 DR Set of oligonucleotides, useful for diagnosis and cell typing, is
 XX designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 FT Claim 1; SEQ ID NO 356367; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABR00010-ABR82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX Sequence 12 BP; 9 A; 0 C; 2 G; 1 T; 0 U; 0 Other;
 SQ Query Match 13.7%; Score 10; DB 1; Length 12;
 Best Local Similarity 100.0%; Pred. NO. 1e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 906 CATTTTCCTT 915
 DB 12 CATTTTCCTT 3
 RESULT 703
 ABI63850
 ID ABI63850 standard; DNA; 12 BP.
 XX AC ABI63850;
 XX DT 22-FEB-2002 (first entry)
 XX DE Oligonucleotide primer SEQ ID NO 363823 for detecting SNP TSC0054076.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 OS WO200177384-A2.
 PN 18-OCT-2001.
 PD 06-APR-2001; 2001WO-IB000713.
 PF 07-APR-2000; 2000DE-01019173.
 PR (EPIG-) EPIGENOMICS AG.
 PA Olek A, Piepenbrock C, Berlin K;
 XX PI

DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 363823; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 12 BP; 1 A; 2 C; 1 G; 8 T; 0 U; 0 Other;
Query Match 13.7%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 906 CATTTCTTT 915
DB 2 CATTTCTTT 11
RESULT 704
ABH69829/C
ID ABH69829 standard; DNA; 12 BP.
XX
AC ABH69829;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide primer SEQ ID NO 269806 for detecting SNP TSC0001888.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PJ 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 269806; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,

CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 12 BP; 6 A; 1 C; 0 G; 5 T; 0 U; 0 Other;
Query Match 13.7%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 948 TTTAATGTAT 957
DB 11 TTTAATGTAT 2
RESULT 705
ABI73953
ID ABI73953 standard; DNA; 12 BP.
XX
AC ABI73953;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide primer SEQ ID NO 373926 for detecting SNP TSC0060394.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PJ 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 373926; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 12 BP; 0 A; 7 C; 0 G; 5 T; 0 U; 0 Other;
Query Match 13.7%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

PP 06-APR-2001; 2001WO-IB000713.
XX
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
PI
XX WPI; 2001-657177/75.
DR
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 303856; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 12 BP; 2 A; 0 C; 5 G; 5 T; 0 U; 0 Other;
SQ
Query Match 13.7%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 945 TGGTTTAATG 954
DQ 1 TGGTTTAATG 10
RESULT 709
ABI10334
ID ABI10334 standard; DNA; 12 BP.
XX
XX ABI10334;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide primer SEQ ID NO 310307 for detecting SNP TSC0023910.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX Oligonucleotide primer SEQ ID NO 310307 for detecting SNP TSC0023910.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
PI
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
PT

XX
XX
XX Claim 1; SEQ ID NO 310307; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 12 BP; 2 A; 3 C; 0 G; 7 T; 0 U; 0 Other;
SQ
Query Match 13.7%; Score 10; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 905 TCATTTTCTT 914
DQ 2 TCATTTTCTT 11
RESULT 710
ABI68556
ID ABI68556 standard; DNA; 12 BP.
XX
XX ABI68556;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide primer SEQ ID NO 368529 for detecting SNP TSC0057065.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
PI
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 368529; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX

```

1 was obtained in electronic format from WIPO at
2 ftp.wipo.int/pub/published_pct_sequences
3
4 Sequence 12 BP; 3 A; 0 C; 3 G; 6 T; 0 U; 0 Other;
5
6 Query Match 13.7%; Score 10; DB 1; Length 12;
7 Best Local Similarity 100.0%; Pred. No. 1e+03;
8 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
9
10 946 GCTTTAAATCT 955
11 |||||
12 1 GCTTTAAATCT 10
13
14 RESULT 711
15 ID ABH91718 standard; DNA; 12 BP.
16 AC ABH91718;
17 XX
18 DT 22-FEB-2002 (first entry)
19 XX
20 DE Oligonucleotide primer SEQ ID NO 336425 for detecting SNP TSC0039353.
21 XX
22 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
23 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
24 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
25 XX
26 OS Homo sapiens.
27 XX
28 FN WO200177384-A2.
29 XX
30 PD 18-OCT-2001.
31 XX
32 PF 06-APR-2001; 2001WO-IB0000713.
33 XX
34 PR 07-APR-2000; 2000DE-01019173.
35 XX
36 PA (EPIG-) EPIGENOMICS AG.
37 XX
38 PI Olek A, Piepenbrock C, Berlin K;
39 XX
40 DR WPI; 2001-657177/75.
41 XX
42 PT Set of oligonucleotides, useful for diagnosis and cell typing, is
43 PT designed to detect single-nucleotide polymorphisms and cytosine
44 PT methylation status.
45 XX
46 PS Claim 1; SEQ ID NO 336425; 29pp + Sequence Listing; German.
47 XX
48 CC This invention describes novel oligonucleotide primers or peptide nucleic
49 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
50 CC and cytosine methylation status in chemically pretreated genomic DNA. The
51 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
52 CC range of diseases including immune system, gastrointestinal, respiratory,
53 CC central nervous system, cardiovascular and metabolic disorders. The
54 CC oligomers are also used for detecting cell type differentiation. ABC00010
55 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
56 CC represent the oligomers described in the invention. NOTE: The sequence
57 CC data for this patent did not form part of the printed specification, but
58 CC was obtained in electronic format from WIPO at
59 CC ftp.wipo.int/pub/published_pct_sequences
60 XX
61 SQ Sequence 12 BP; 3 A; 0 C; 3 G; 6 T; 0 U; 0 Other;
62
63 Query Match 13.7%; Score 10; DB 1; Length 12;
64 Best Local Similarity 100.0%; Pred. No. 1e+03;
65 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
66
67 QY 925 CTTTATATCCC 934
68 |||||
69 Db 3 CTTTATATCCC 12
70
71 RESULT 713
72 ID ABC85748/c
73 XX
74 AC ABC85748;
75 XX
76 DT 21-FEB-2002 (first entry)
77 XX
78 DE Oligonucleotide SEQ ID NO 85765 for detecting SNP TSC0021549.
79 XX
80 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
81 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
82
83 was obtained in electronic format from WIPO at
84 ftp.wipo.int/pub/published_pct_sequences
85
86 Sequence 12 BP; 3 A; 0 C; 2 G; 7 T; 0 U; 0 Other;
87
88 Query Match 13.7%; Score 10; DB 1; Length 12;
89 Best Local Similarity 100.0%; Pred. No. 1e+03;
90 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
91
92 944 TTGGTTTAAAT 953
93 |||||
94 3 TTGGTTTAAAT 12
```

KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 OS WO200177384-A2.
 PN 18-OCT-2001.
 PD 06-APR-2001; 2001WO-IB000713.
 PF 07-APR-2000; 2000DE-01019173.
 PR (EPIG-) EPIGENOMICS AG.
 PA Olek A, Piepenbrock C, Berlin K;
 PI WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 85765; 29pp + Sequence Listing; German.
 PS This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 8 A; 0 C; 2 G; 3 T; 0 U; 0 Other;
 Query Match 13.7%; Score 10; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 906 CATTTTCTTT 915
 DB 11 CATTTTCTTT 2
 RESULT 714
 ABF38703
 ID ABF38703 standard; DNA; 13 BP.
 XX ABF38703;
 AC 21-FEB-2002 (first entry)
 DT Oligonucleotide SEQ ID NO 138700 for detecting SNP TSC0034750.
 DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 OS WO200177384-A2.
 PN 18-OCT-2001.
 PD 06-APR-2001; 2001WO-IB000713.
 PF 07-APR-2000; 2000DE-01019173.
 PR (EPIG-) EPIGENOMICS AG.
 PA

XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 138700; 29pp + Sequence Listing; German.
 PS This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 2 A; 4 C; 0 G; 6 T; 0 U; 1 Other;
 Query Match 13.7%; Score 10; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 925 CTTTATATCCC 934
 DB 2 CTTTATATCCC 11
 RESULT 715
 ABH04494
 ID ABH04494 standard; DNA; 13 BP.
 XX ABH04494;
 AC 22-FEB-2002 (first entry)
 DT Oligonucleotide SEQ ID NO 204471 for detecting SNP TSC0050159.
 DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 OS WO200177384-A2.
 PN 18-OCT-2001.
 PD 06-APR-2001; 2001WO-IB000713.
 PF 07-APR-2000; 2000DE-01019173.
 PR (EPIG-) EPIGENOMICS AG.
 PA Olek A, Piepenbrock C, Berlin K;
 PI WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 204471; 29pp + Sequence Listing; German.
 PS This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

947 GTTTAATGTA 956
|||||
2 GTTTAATGTA 11

RESULT 716

ABF80945 standard; DNA; 13 BP.

ABF80945;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 180942 for detecting SNP TSC0044777.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB0000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 180942; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 3 A; 6 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

929 TATCCCTCCT 938
|||||
2 TATCCCTCCT 11

RESULT 717

ABC45854 standard; DNA; 13 BP.

ABC45854;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 45871 for detecting SNP TSC0013320.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB0000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 45871; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 4 A; 0 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

947 GTTTAATGTA 956
|||||
1 GTTTAATGTA 10

RESULT 718

ABC47695 standard; DNA; 13 BP.

XX

```
AC ABC47695;
XX
XX 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 47712 for detecting SNP TSC0013678.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPiG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 47712; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC9989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 3 A; 3 C; 0 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 13.7%; Score 10; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1e+03;
XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 905 TCATTTTCTTT 914
XX : |||||
XX 1 TCATTTTCTTT 10
XX
XX RESULT 719
XX ABF02349
XX ID ABF02349 standard; DNA; 13 BP.
XX
XX AC ABF02349;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 102346 for detecting SNP TSC0025524.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX
```

```
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPiG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 102346; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC9989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 1 A; 2 C; 0 G; 9 T; 0 U; 1 Other;
XX
XX Query Match 13.7%; Score 10; DB 1; Length 13;
XX Best Local Similarity 83.3%; Pred. No. 1e+03;
XX Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
XX
XX QY 904 GTCATTTTCTTT 915
XX : |||||
XX 1 RTTATTTTCTTT 12
XX
XX RESULT 720
XX ABF04505/C
XX ID ABF04505 standard; DNA; 13 BP.
XX
XX AC ABF04505;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 104502 for detecting SNP TSC0026125.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPiG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX
```

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 104502; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. The -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 8 A; 3 C; 1 G; 0 T; 0 U; 1 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 83.3%; Pred. No. 1e+03; Mismatches 1; Indels 0; Gaps 0;

908 TTTTCTTGGTC 919
|||||
12 TTTTCTTGGTY 1

RESULT 721
3C54943/C
ABC54943 standard; DNA; 13 BP.

ABC54943;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 54960 for detecting SNP TSC0015048.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 54960; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010

-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 8 A; 2 C; 0 G; 2 T; 0 U; 1 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 83.3%; Pred. No. 1e+03; Mismatches 1; Indels 0; Gaps 0;

947 GTTAAATGATC 958
|||||
12 GTTAAATGATY 1

RESULT 722
ABF09013/C
ID ABF09013 standard; DNA; 13 BP.

AC ABF09013;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 109010 for detecting SNP TSC0027286.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 109010; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 9 A; 1 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03; Mismatches 0; Indels 0; Gaps 0;

948 TTTAAATGAT 957


```

D2      11 TTTAATGTAT 2
      |||||
RESULT 723
ID ABC59029/c
XX ABC59029 standard; DNA; 13 BP.
XX
AC ABC59029;
XX
DT 21-FEB-2002 (first entry)
XX
D3 Oligonucleotide SEQ ID NO 59046 for detecting SNP TSC0015825.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PI WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
PI WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 59046; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 8 A; 2 C; 0 G; 3 T; 0 U; 0 Other;
XX
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 948 TTTAATGTAT 957
      |||||
D3 11 TTTAATGTAT 2
      |||||
RESULT 724
ID ABC63810/c
XX ABC63810 standard; DNA; 13 BP.
XX
AC ABC63810;
XX
DT 21-FEB-2002 (first entry)
XX
D3 Oligonucleotide SEQ ID NO 63827 for detecting SNP TSC0016855.

```

```

XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PI WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
PI WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 63827; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 7 A; 0 C; 3 G; 3 T; 0 U; 0 Other;
XX
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 926 TTTTATCCCT 935
      |||||
D3 12 TTTTATCCCT 3
      |||||
RESULT 725
ID ABF45133/c
XX ABF45133 standard; DNA; 13 BP.
XX
AC ABF45133;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 145130 for detecting SNP TSC0036516.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PI WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX

```

07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
Claim 1; SEQ ID NO 1451130; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 8 A; 2 C; 1 G; 1 T; 0 U; 1 Other;
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 83.3%; Pred. No. 1e+03;
Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
920 TTGGCTTTTAT 931
|||||
12 TTGGCTTTTAY 1
SULT 726
H20194/C
ABH20194 standard; DNA; 13 BP.
ABH20194;
22-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 220171 for detecting SNP TSC0053577.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
Claim 1; SEQ ID NO 220171; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX Sequence 13 BP; 7 A; 0 C; 5 G; 1 T; 0 U; 0 Other;
SQ Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 925 CTTTATCCC 934
Db |||||
13 CTTTATCCC 4
RESULT 727
ABH03510/C
ID ABH03510 standard; DNA; 13 BP.
XX AC ABH03510;
XX 22-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 203487 for detecting SNP TSC0049964.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
XX Claim 1; SEQ ID NO 203487; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

```
XX
SQ Sequence 13 BP; 9 A; 0 C; 3 G; 1 T; 0 U; 0 Other;

Query Match      13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 905 TCATTTCCTT 914
Db 10 TCATTTCCTT 1

RESULT 728
ABH06011
ID ABH06011 standard; DNA; 13 BP.
XX
AC ABH06011;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 205988 for detecting SNP TSC0050474.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
FN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 205988; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 3 A; 5 C; 0 G; 5 T; 0 U; 0 Other;

Query Match      13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 935 TCCTCTTCAT 944
Db 3 TCCTCTTCAT 12

RESULT 729
ABH06011
ID ABH06011 standard; DNA; 13 BP.
XX
AC ABH06011;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 182788 for detecting SNP TSC0045166.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
```

```
ABH32116
ID ABH32116 standard; DNA; 13 BP.
XX
AC ABH32116;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 232093 for detecting SNP TSC0056602.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
FN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 232093; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 4 A; 0 C; 1 G; 8 T; 0 U; 0 Other;

Query Match      13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 948 TTTAATGTAT 957
Db 2 TTTAATGTAT 11

RESULT 730
ABF82791/c
ID ABF82791 standard; DNA; 13 BP.
XX
AC ABF82791;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 182788 for detecting SNP TSC0045166.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
```

```
XX Homo sapiens.
DR WO200177384-A2.
XX
PT 18-OCT-2001.
XX
PS 06-APR-2001; 2001WO-IB0000713.
XX
PS 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 182788; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABG99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 7 A; 2 C; 1 G; 2 T; 0 U; 1 Other;
XX
XX Query Match 13.7%; Score 10; DB 1; Length 13;
XX Best Local Similarity 83.3%; Pred. No. 1e+03;
XX Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
XX
XX / 920 TTGGCTTTTAT 931
XX ||||| |||||
XX 12 TTGGCTTTTAY 1
XX
XX RESULT 731
XX 3C4939/C
XX ) ABC44939 standard; DNA; 13 BP.
XX
XX ABC44939;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 44956 for detecting SNP TSC0013151.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB0000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
```

```
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 44956; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABG99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 6 A; 2 C; 0 G; 4 T; 0 U; 1 Other;
XX
XX Query Match 13.7%; Score 10; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1e+03;
XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 947 GTTTAATGTA 956
XX ||||| |||||
XX Db 13 GTTTAATGTA 4
XX
XX RESULT 732
XX ABC20523
XX ID ABC20523 standard; DNA; 13 BP.
XX
XX AC ABC20523;
XX
XX DT 20-FEB-2002 (first entry)
XX
XX DE Oligonucleotide SEQ ID NO 20540 for detecting SNP TSC0004187.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX OS Homo sapiens.
XX
XX PN WO200177384-A2.
XX
XX PD 18-OCT-2001.
XX
XX PF 06-APR-2001; 2001WO-IB0000713.
XX
XX PR 07-APR-2000; 2000DE-01019173.
XX
XX PA (EPIG-) EPIGENOMICS AG.
XX
XX PI Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 20540; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABG99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 6 A; 2 C; 0 G; 4 T; 0 U; 1 Other;
```

CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 1 A; 6 C; 0 G; 5 T; 0 U; 1 Other;
 Query Match 13.7%; Score 10; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 935 TCCTCTTCAT 944
 DB 2 TCCTCTTCAT 11
 RESULT 733
 ABC98228
 ID ABC98228 standard; DNA; 13 BP.
 AC
 AC ABC98228;
 XX
 DT 21-FEB-2002 (first entry)
 XX
 XX Oligonucleotide SEQ ID NO 98245 for detecting SNP TSC0024404.
 DE
 DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 CS Homo sapiens.
 XX
 XX WO200177384-A2.
 PV
 XX 18-OCT-2001.
 PD
 XX 06-APR-2001; 2001WO-IB000713.
 PF
 XX 07-APR-2000; 2000DE-01019173.
 XX
 XX (EPIG-) EPIGENOMICS AG.
 XX
 XX Olek A, Piepenbrock C, Berlin K;
 FI
 FI WPI; 2001-657177/75.
 DR
 XX
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 XX Claim 1; SEQ ID NO 98245; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 5 A; 0 C; 1 G; 7 T; 0 U; 0 Other;
 Query Match 13.7%; Score 10; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 948 TTTAATGTAT 957
 DB 1 TTTAATGTAT 10
 RESULT 734
 ABC26065
 ID ABC26065 standard; DNA; 13 BP.
 AC
 AC ABC26065;
 XX
 DT 20-FEB-2002 (first entry)
 XX
 XX Oligonucleotide SEQ ID NO 26082 for detecting SNP TSC0006747.
 DE
 DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 XX WO200177384-A2.
 PN
 XX 18-OCT-2001.
 PD
 XX 06-APR-2001; 2001WO-IB000713.
 PF
 XX 07-APR-2000; 2000DE-01019173.
 PR
 XX (EPIG-) EPIGENOMICS AG.
 PA
 XX
 XX Olek A, Piepenbrock C, Berlin K;
 FI
 FI WPI; 2001-657177/75.
 DR
 XX
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 XX Claim 1; SEQ ID NO 26082; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 2 A; 3 C; 0 G; 8 T; 0 U; 0 Other;
 Query Match 13.7%; Score 10; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 906 CATTTTCTTT 915
 DB 3 CATTTTCTTT 12
 RESULT 735
 ABC03476/c
 ID ABC03476 standard; DNA; 13 BP.
 AC
 AC ABC03476;
 XX

```
20-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 3467 for detecting SNP TSC0001294.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 3467; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BF; 9 A; 0 C; 2 G; 2 T; 0 U; 0 Other;
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03; Mismatches 0; Indels 0; Gaps 0;
Matches 10; Conservative 0;
906 CATTTCITTT 915
13 CATTTCITTT 4
RESULT 736
AC54942
ABC54942 standard; DNA; 13 BP.
ABC54942;
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 54959 for detecting SNP TSC0015048.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
```

```
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
WPI; 2001-657177/75.
XX
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 54959; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 2 A; 0 C; 2 G; 8 T; 0 U; 1 Other;
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 83.3%; Pred. No. 1e+03; Mismatches 1; Indels 0; Gaps 0;
Matches 10; Conservative 1;
QY 947 GTTTAATGTATC 958
DB 2 GTTTAATGTATY 13
RESULT 737
ABF99923/c
ID ABF99923 standard; DNA; 13 BP.
XX
AC ABF99923;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 199920 for detecting SNP TSC0049189.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
WPI; 2001-657177/75.
XX
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
```

PT methylation status.

XX Claim 1; SEQ ID NO 199920; 29pp + Sequence Listing; German.

XX

CC This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

XX

SQ Sequence 13 BP; 9 A; 3 C; 0 G; 0 T; 0 U; 1 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;

Best Local Similarity 83.3%; Pred. No. 1e+03;

Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 913 TTGGTCTTGC 924
|||||

Db 12 TTGGTCTTGCY 1
|||||

RESULT 738

ABH25091

ID ABH25091 standard; DNA; 13 BP.

XX

AC ABH25091;

XX

DT 22-FEB-2002 (first entry)

XX

DE Oligonucleotide SEQ ID NO 225068 for detecting SNP TSC0054876.

XX

KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

XW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;

KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX

OS Homo sapiens.

XX

PN WO200177384-A2.

XX

PJ 18-OCT-2001.

XX

PF 06-APR-2001; 2001WO-IB000713.

XX

PR 07-APR-2000; 2000DE-01019173.

XX

PA (EPIG-) EPIGENOMICS AG.

XX

PI Olek A, Piepenbrock C, Berlin K;

XX

DR WPI; 2001-657177/75.

XX

PT Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

XX

PS Claim 1; SEQ ID NO 225068; 29pp + Sequence Listing; German.

XX

CC This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

XX

SQ Sequence 13 BP; 9 A; 3 C; 0 G; 0 T; 0 U; 1 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;

Best Local Similarity 83.3%; Pred. No. 1e+03;

Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 913 TTGGTCTTGC 924
|||||

Db 12 TTGGTCTTGCY 1
|||||

RESULT 738

ABH25091

ID ABH25091 standard; DNA; 13 BP.

XX

AC ABH25091;

XX

DT 22-FEB-2002 (first entry)

XX

DE Oligonucleotide SEQ ID NO 225068 for detecting SNP TSC0054876.

XX

KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

XW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;

KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX

OS Homo sapiens.

XX

PN WO200177384-A2.

XX

PJ 18-OCT-2001.

XX

PF 06-APR-2001; 2001WO-IB000713.

XX

PR 07-APR-2000; 2000DE-01019173.

XX

PA (EPIG-) EPIGENOMICS AG.

XX

PI Olek A, Piepenbrock C, Berlin K;

XX

DR WPI; 2001-657177/75.

XX

PT Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

XX

PS Claim 1; SEQ ID NO 225068; 29pp + Sequence Listing; German.

XX

CC This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

XX

SQ Sequence 13 BP; 9 A; 3 C; 0 G; 0 T; 0 U; 1 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;

Best Local Similarity 83.3%; Pred. No. 1e+03;

Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 913 TTGGTCTTGC 924
|||||

Db 12 TTGGTCTTGCY 1
|||||

RESULT 738

ABH25091

ID ABH25091 standard; DNA; 13 BP.

XX

AC ABH25091;

XX

DT 22-FEB-2002 (first entry)

XX

DE Oligonucleotide SEQ ID NO 180417 for detecting SNP TSC0007140.

XX

KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

XW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;

KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX

OS Homo sapiens.

XX

PN WO200177384-A2.

XX

PJ 18-OCT-2001.

XX

PF 06-APR-2001; 2001WO-IB000713.

XX

PR 07-APR-2000; 2000DE-01019173.

XX

PA (EPIG-) EPIGENOMICS AG.

XX

PI Olek A, Piepenbrock C, Berlin K;

XX

DR WPI; 2001-657177/75.

XX

PT Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

XX

PS Claim 1; SEQ ID NO 180417; 29pp + Sequence Listing; German.

XX

CC This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

XX

SQ Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;

Best Local Similarity 100.0%; Pred. No. 1e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 948 TTTAATGTAT 957
|||||

Db 1 TTTAATGTAT 10
|||||

CC data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

XX

SQ Sequence 13 BP; 4 A; 4 C; 1 G; 4 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;

Best Local Similarity 100.0%; Pred. No. 1e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 955 TATCGCTACC 964
|||||

Db 4 TATCGCTACC 13
|||||

RESULT 739

ABF80420

ID ABF80420 standard; DNA; 13 BP.

XX

AC ABF80420;

XX

DT 22-FEB-2002 (first entry)

XX

DE Oligonucleotide SEQ ID NO 180417 for detecting SNP TSC0007140.

XX

KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

XW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;

KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX

OS Homo sapiens.

XX

PN WO200177384-A2.

XX

PJ 18-OCT-2001.

XX

PF 06-APR-2001; 2001WO-IB000713.

XX

PR 07-APR-2000; 2000DE-01019173.

XX

PA (EPIG-) EPIGENOMICS AG.

XX

PI Olek A, Piepenbrock C, Berlin K;

XX

DR WPI; 2001-657177/75.

XX

PT Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

XX

PS Claim 1; SEQ ID NO 180417; 29pp + Sequence Listing; German.

XX

CC This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

XX

SQ Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;

Best Local Similarity 100.0%; Pred. No. 1e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 948 TTTAATGTAT 957
|||||

Db 1 TTTAATGTAT 10
|||||

PA (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 161634; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 6 A; 2 C; 0 G; 5 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 947 GTTTAAATGTA 956
DB 12 GTTTAAATGTA 3

RESULT 743
ABH59074/C
ID ABH59074 standard; DNA; 13 BP.
AC ABH59074;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 259051 for detecting SNP TSC0007540.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 259051; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic

CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 6 A; 0 C; 1 G; 5 T; 0 U; 1 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 83.3%; Pred. No. 1e+03;
Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 947 GTTTAAATGTA 958
DB 13 RTTTAATATATC 2

RESULT 744
ABC98229/C
ID ABC98229 standard; DNA; 13 BP.
XX
XX ABC98229;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 98246 for detecting SNP TSC0024404.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 98246; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 7 A; 1 C; 0 G; 5 T; 0 U; 0 Other;

```

Query Match      13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

/ 948 TTTAATGAT 957
) 13 TTTAATGAT 4
|||||
|||||

RESULT 745
ABC64096
) ABC64096 standard; DNA; 13 BP.
ABC64096;
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 64113 for detecting SNP TSC0016920.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 64113; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligomers are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 5 A; 0 C; 2 G; 6 T; 0 U; 0 Other;

This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligomers are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 5 A; 0 C; 2 G; 6 T; 0 U; 0 Other;

Query Match      13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

/ 943 ATTGTTTAA 952
) 3 ATTGTTTAA 12
|||||
|||||

RESULT 746
ABC64097/c
) ABC64097 standard; DNA; 13 BP.

```

```

XX ABC64097;
AC
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 64114 for detecting SNP TSC0016920.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 64114; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 6 A; 2 C; 0 G; 5 T; 0 U; 0 Other;

Query Match      13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 943 ATTGTTTAA 952
DB 11 ATTGTTTAA 2
|||||
|||||

RESULT 747
ABF25028
ID ABF25028 standard; DNA; 13 BP.
XX
AC ABF25028;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 125025 for detecting SNP TSC0031242.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX

```

PN WO200177384-A2.
 XX
 PJ 18-OCT-2001.
 XX
 XX 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 XX Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 XX Claim 1; SEQ ID NO 125025; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 3 A; 0 C; 4 G; 6 T; 0 U; 0 Other;
 Query Match 13.7%; Score 10; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 945 TGGTTTAATG 954
 DB 3 TGGTTTAATG 12
 |||||
 |||||
 RESULT 748
 ABH18305
 ID ABH18305 standard; DNA; 13 BP.
 AC ABH18305;
 XX
 XX 22-FEB-2002 (first entry)
 DT
 XX Oligonucleotide SEQ ID NO 218282 for detecting SNP TSC0053061.
 DE
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 XX WO200177384-A2.
 XX
 XX 18-OCT-2001.
 PD
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 XX 07-APR-2000; 2000DE-01019173.
 PR
 XX (EPIG-) EPIGENOMICS AG.
 PA
 XX Olek A, Piepenbrock C, Berlin K;
 XX
 XX WPI; 2001-657177/75.
 XX
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 XX Claim 1; SEQ ID NO 125025; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 3 A; 0 C; 4 G; 6 T; 0 U; 0 Other;
 Query Match 13.7%; Score 10; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 945 TGGTTTAATG 954
 DB 3 TGGTTTAATG 12
 |||||
 |||||
 RESULT 748
 ABH18305
 ID ABH18305 standard; DNA; 13 BP.
 AC ABH18305;
 XX
 XX 22-FEB-2002 (first entry)
 DT
 XX Oligonucleotide SEQ ID NO 218282 for detecting SNP TSC0053061.
 DE
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 XX WO200177384-A2.
 XX
 XX 18-OCT-2001.
 PD
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 XX 07-APR-2000; 2000DE-01019173.
 PR
 XX (EPIG-) EPIGENOMICS AG.
 PA
 XX Olek A, Piepenbrock C, Berlin K;
 XX
 XX WPI; 2001-657177/75.
 XX

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 XX Claim 1; SEQ ID NO 218282; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 2 A; 4 C; 0 G; 7 T; 0 U; 0 Other;
 Query Match 13.7%; Score 10; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 906 CATTTCCTTT 915
 DB 2 CATTTCCTTT 11
 |||||
 |||||
 RESULT 749
 ABF45132
 ID ABF45132 standard; DNA; 13 BP.
 AC ABF45132;
 XX
 XX 21-FEB-2002 (first entry)
 DT
 XX Oligonucleotide SEQ ID NO 145129 for detecting SNP TSC0036516.
 DE
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 XX WO200177384-A2.
 XX
 XX 18-OCT-2001.
 PD
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 XX 07-APR-2000; 2000DE-01019173.
 PR
 XX (EPIG-) EPIGENOMICS AG.
 PA
 XX Olek A, Piepenbrock C, Berlin K;
 XX
 XX WPI; 2001-657177/75.
 XX
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 XX Claim 1; SEQ ID NO 145129; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX

oligomers are also used for detecting cell type differentiation. ABC00010
-ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 1 A; 1 C; 2 G; 8 T; 0 U; 1 Other;
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 83.3%; Pred. No. 1e+03;
Matches 10; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

920 TTTCCTTTTAT 931
|||||
2 TTTCGCTTTAT 13

RESULT 750
ABF99922
ABF99922 standard; DNA; 13 BP.

ABF99922;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 199919 for detecting SNP TSC0049189.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.

Claim 1; SEQ ID NO 199919; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 0 A; 0 C; 3 G; 9 T; 0 U; 1 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 83.3%; Pred. No. 1e+03;
Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 913 TTTCGCTTTGC 924
|||||
Db 2 TTTCGCTTTGCY 13

RESULT 751

ABH02153
ID ABH02153 standard; DNA; 13 BP.

AC ABH02153;

XX 22-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 202130 for detecting SNP TSC0049691.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.

XX Claim 1; SEQ ID NO 202130; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 2 A; 2 C; 0 G; 9 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 906 CATTTTCCTT 915
|||||
Db 1 CATTTTCCTT 10

RESULT 752

ABH04332/c
ID ABH04332 standard; DNA; 13 BP.

XX ABH04332;

XX 22-FEB-2002 (first entry)

XX

DE Oligonucleotide SEQ ID NO 204309 for detecting SNP TSC0050117.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
CS Homo sapiens.
XX
EN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PP 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 204309; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 8 A; 0 C; 2 G; 3 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 905 TCATTTTCTT 914
DB 11 TCATTTTCTT 2

RESULT 753
ABF83110/c
ID ABF83110 standard; DNA; 13 BP.
XX
AC ABF83110;
XX
XX 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 183107 for detecting SNP TSC0000589.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
CS Homo sapiens.
XX
EN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PP 06-APR-2001; 2001WO-IB000713.
PF

XX 07-APR-2000; 2000DE-01019173.
PR (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 183107; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 6 A; 0 C; 7 G; 0 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 931 TCCCTCTCTCT 940
DB 13 TCCCTCTCTCT 4

RESULT 754
ABH47963/c
ID ABH47963 standard; DNA; 13 BP.
XX
AC ABH47963;
XX
XX 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 247940 for detecting SNP TSC0009360.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
CS Homo sapiens.
XX
EN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PP 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC000010-AB399989, ABF00010-ABF99989, ABH00010-ABH99989 and ABJ00010-ABJ92073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at

Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
Claim 1; SEQ ID NO 101973; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABG99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 4 A; 0 C; 1 G; 8 T; 0 U; 0 Other;
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03; Mismatches 0; Indels 0; Gaps 0;
Matches 10; Conservative 0;
QY 948 TTTAATGTAT 957
DB 2 TTTAATGTAT 11
|||||
RESULT 760
ABF94202
ID ABF94202 standard; DNA; 13 BP.
XX AC ABF94202;
XX DT 22-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 194199 for detecting SNP TSC0047758.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX EN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB0000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX DR Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
XX PS Claim 1; SEQ ID NO 194199; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABG99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX CC Claim 1; SEQ ID NO 194199; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The

CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABG99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX CC Sequence 13 BP; 4 A; 0 C; 1 G; 8 T; 0 U; 0 Other;
SQ Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03; Mismatches 0; Indels 0; Gaps 0;
Matches 10; Conservative 0;
QY 948 TTTAATGTAT 957
DB 2 TTTAATGTAT 11
|||||
RESULT 761
ABF97925
ID ABF97925 standard; DNA; 13 BP.
XX AC ABF97925;
XX DT 22-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 197922 for detecting SNP TSC0048708.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX EN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB0000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX DR Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
XX PS Claim 1; SEQ ID NO 197922; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABG99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX CC Sequence 13 BP; 4 A; 0 C; 0 G; 5 T; 0 U; 0 Other;
SQ Query Match 13.7%; Score 10; DB 1; Length 13;
Query Match

	PT designed to detect single-nucleotide polymorphisms and cytosine methylation status.
	XX Claim 1; SEQ ID NO 31718; 29pp + Sequence Listing; German.
	XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF99989, ABH00010-ABH99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
	XX SQ Sequence 13 BP; 1 A; 4 C; 0 G; 8 T; 0 U; 0 Other;
	Query Match 13.7%; Score 10; DB 1; Length 13; Best Local Similarity 100.0%; Pred. No. 1e+03; Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0
	QY 905 TCATTTTCTT 914 DB 4 TCATTTTCTT 13
	RESULT 766 ABC59028
	ID ABC59028 standard; DNA; 13 BP.
	AC ABC59028;
	XX 21-FEB-2002 (first entry)
	DE Oligonucleotide SEQ ID NO 59045 for detecting SNP TSC0015825.
	KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; XX central nervous system; gastrointestinal; respiratory; immune; metabolic. OS Homo sapiens. PN WO200177384-A2. XX 18-OCT-2001.
	PX 06-APR-2001; 2001WO-IB000713.
	PR 07-APR-2000; 2000DE-01019173.
	PA (EPIG-) EPIGENOMICS AG.
	XX Olek A, Piepenbrock C, Berlin K; XX WPI; 2001-657177/75.
	Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
	PS Claim 1; SEQ ID NO 59045; 29pp + Sequence Listing; German.
	XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF99989, ABH00010-ABH99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
	XX SQ Sequence 13 BP; 4 A; 0 C; 1 G; 8 T; 0 U; 0 Other;
	Query Match 13.7%; Score 10; DB 1; Length 13; Best Local Similarity 100.0%; Pred. No. 1e+03; Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
	r 948 TTTAATGTAT 957 r 3 TTTAATGTAT 12
	RESULT 765 BC31701
) ABC31701 standard; DNA; 13 BP.
	ABC31701;
	20-FEB-2002 (first entry)
	Oligonucleotide SEQ ID NO 31718 for detecting SNP TSC0009885.
	SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic. Homo sapiens. WO200177384-A2. 18-OCT-2001.
	06-APR-2001; 2001WO-IB000713.
	07-APR-2000; 2000DE-01019173.
	(EPIG-) EPIGENOMICS AG.
	Olek A, Piepenbrock C, Berlin K; WPI; 2001-657177/75.
	Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

1	18-OCT-2001.	PT	designed to detect single-nucleotide polymorphisms and cytosine methylation status.	XX
2	06-APR-2001; 2001WO-IB000713.	PS	Claim 1; SEQ ID NO 31718; 29pp + Sequence Listing; German.	XX
3	07-APR-2000; 2000DE-01019173.	CC	This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences	XX
4	WPI; 2001-657177/75.	XX	Sequence 13 BP; 1 A; 4 C; 0 G; 8 T; 0 U; 0 Other;	XX
5	Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.	PT	Query Match 13.7%; Score 10; DB 1; Length 13; Best Local Similarity 100.0%; Pred. No. 1e+03; Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0	XX
6	Claim 1; SEQ ID NO 19237; 29pp + Sequence Listing; German.	PS		XX
7	This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences	CC		XX
8	Sequence 13 BP; 4 A; 0 C; 1 G; 8 T; 0 U; 0 Other;	XX		XX
9	Query Match 13.7%; Score 10; DB 1; Length 13; Best Local Similarity 100.0%; Pred. No. 1e+03; Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	XX		XX
10	948 TTTAATGTAT 957	QY	905 TCATTTTCTT 914	XX
11	3 TTTAATGTAT 12	DB	4 TCATTTTCTT 13	XX
12		RESULT 766		XX
13	ABC31701 standard; DNA; 13 BP.	ID	ABC59028 standard; DNA; 13 BP.	XX
14	ABC31701;	AC	ABC59028;	XX
15	20-FEB-2002 (first entry)	XX	21-FEB-2002 (first entry)	XX
16	Oligonucleotide SEQ ID NO 31718 for detecting SNP TSC0009885.	XX	Oligonucleotide SEQ ID NO 59045 for detecting SNP TSC0015825.	XX
17	SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.	XX	SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.	XX
18	Homo sapiens.	OS	Homo sapiens.	XX
19	WO200177384-A2.	PN	WO200177384-A2.	XX
20	18-OCT-2001	PD	18-OCT-2001.	XX
21	06-APR-2001; 2001WO-IB000713.	PF	06-APR-2001; 2001WO-IB000713.	XX
22	07-APR-2000; 2000DE-01019173.	PR	07-APR-2000; 2000DE-01019173.	XX
23	(EPIG-) EPIGENOMICS AG.	PA	(EPIG-) EPIGENOMICS AG.	XX
24	Olek A, Piepenbrock C, Berlin K;	PI	Olek A, Piepenbrock C, Berlin K;	XX
25	WPI; 2001-657177/75.	DR	WPI; 2001-657177/75.	XX
26	Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.	PT	Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.	XX
27	Claim 1; SEQ ID NO 59045; 29pp + Sequence Listing; German.	PS	Claim 1; SEQ ID NO 59045; 29pp + Sequence Listing; German.	XX
28	This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences	CC	This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences	XX
29	Sequence 13 BP; 4 A; 0 C; 1 G; 8 T; 0 U; 0 Other;	XX		XX
30	Query Match 13.7%; Score 10; DB 1; Length 13; Best Local Similarity 100.0%; Pred. No. 1e+03; Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	XX		XX
31	948 TTTAATGTAT 957	QY	905 TCATTTTCTT 914	XX
32	3 TTTAATGTAT 12	DB	4 TCATTTTCTT 13	XX
33		RESULT 765		XX
34	ABC31701 standard; DNA; 13 BP.	ID	ABC59028 standard; DNA; 13 BP.	XX
35	ABC31701;	AC	ABC59028;	XX
36	20-FEB-2002 (first entry)	XX	21-FEB-2002 (first entry)	XX
37	Oligonucleotide SEQ ID NO 31718 for detecting SNP TSC0009885.	XX	Oligonucleotide SEQ ID NO 59045 for detecting SNP TSC0015825.	XX
38	SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.	XX	SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.	XX
39	Homo sapiens.	OS	Homo sapiens.	XX
40	WO200177384-A2.	PN	WO200177384-A2.	XX
41	18-OCT-2001.	PD	18-OCT-2001.	XX
42	06-APR-2001; 2001WO-IB000713.	PF	06-APR-2001; 2001WO-IB000713.	XX
43	07-APR-2000; 2000DE-01019173.	PR	07-APR-2000; 2000DE-01019173.	XX
44	(EPIG-) EPIGENOMICS AG.	PA	(EPIG-) EPIGENOMICS AG.	XX
45	Olek A, Piepenbrock C, Berlin K;	PI	Olek A, Piepenbrock C, Berlin K;	XX
46	WPI; 2001-657177/75.	DR	WPI; 2001-657177/75.	XX
47	Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.	PT	Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.	XX

CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 U; 0 Other;
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 948 TTTAATGTAT 957
|||||
DB 3 TTTAATGTAT 12
RESULT 767
ABC35309
ID ABC35309 standard; DNA; 13 BP.
XX
AC ABC35309;
XX
DT 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 35326 for detecting SNP TSC0011192.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN W0200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 35326; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 3 A; 5 C; 0 G; 4 T; 0 U; 1 Other;
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 83.3%; Pred. No. 1e+03;
Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
CY 923 GCCTTTTATCCC 934
:|||||

DB 1 RCTATTATCCC 12
RESULT 768
ABC85749
ID ABC85749 standard; DNA; 13 BP.
XX
AC ABC85749;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 85766 for detecting SNP TSC0021549.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN W0200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 85766; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 3 A; 2 C; 0 G; 8 T; 0 U; 0 Other;
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 906 CATTTTCTTT 915
|||||
DB 3 CATTTTCTTT 12
RESULT 769
ABC86878
ID ABC86878 standard; DNA; 13 BP.
XX
AC ABC86878;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 86895 for detecting SNP TSC0021828.
XX

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic. Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 86895; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ASI00010-ASI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 5 A; 0 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;

Best Local Similarity 100.0%; Pred. No. 1e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

947 GTTAAATGTA 956

|||||

2 GTTAAATGTA 11

SULT 770

F18110

ABF18110 standard; DNA; 13 BP.

ABF18110;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 118107 for detecting SNP TSC0029535.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic. Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

XX Claim 1; SEQ ID NO 118107; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ASI00010-ASI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 13 BP; 2 A; 0 C; 2 G; 8 T; 0 U; 1 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;

Best Local Similarity 83.3%; Pred. No. 1e+03;

Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 907 ATTTCCTTTGGT 918

|||||

2 ATTTCCTTTGGY 13

Db

RESULT 771

ABF18111/c

ID ABF18111 standard; DNA; 13 BP.

XX AC ABF18111;

XX DT 21-FEB-2002 (first entry)

XX DE Oligonucleotide SEQ ID NO 118108 for detecting SNP TSC0029535.

XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic. Homo sapiens.

XX OS

XX PN WO200177384-A2.

XX PD 18-OCT-2001.

XX PF 06-APR-2001; 2001WO-IB000713.

XX PR 07-APR-2000; 2000DE-01019173.

XX PA (EPIG-) EPIGENOMICS AG.

XX PI Olek A, Piepenbrock C, Berlin K;

XX DR WPI; 2001-657177/75.

XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

XX PS Claim 1; SEQ ID NO 118108; 29pp + Sequence Listing; German.

CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 8 A; 2 C; 0 G; 2 T; 0 U; 1 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 83.3%; Pred. No. 1e+03;
Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 907 ATTTCCTTTGGT 918
Db 12 ATTATATTGGY 1
|||||
RESULT 772
ABF36795/c
ID ABF36795 standard; DNA; 13 BP.
XX
AC ABF36795;
XX
XX
XX
XX 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 136792 for detecting SNP TSC0034197.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 136792; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX

SQ Sequence 13 BP; 7 A; 2 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 948 TTTAATGATAT 957
Db 12 TTTAATGATAT 3
|||||
RESULT 773
ABF38702/c
ID ABF38702 standard; DNA; 13 BP.
XX
AC ABF38702;
XX
XX 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 138699 for detecting SNP TSC0034750.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 138699; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 6 A; 0 C; 4 G; 2 T; 0 U; 1 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 925 CTTTATCC 934
Db 12 CTTTATCC 3
|||||
RESULT 774
ABH22127/c

```

1 ABH22127 standard; DNA; 13 BP.
2 ABH22127;
3
4 22-FEB-2002 (first entry)
5
6 Oligonucleotide SEQ ID NO 222104 for detecting SNP TSC0054046.
7
8 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
9 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
10 central nervous system; gastrointestinal; respiratory; immune; metabolic.
11
12 Homo sapiens.
13
14 WO200177384-A2.
15
16 18-OCT-2001.
17
18 06-APR-2001; 2001WO-IB000713.
19
20 07-APR-2000; 2000DE-01019173.
21
22 (EPIG-) EPIGENOMICS AG.
23
24 Olek A, Piepenbrock C, Berlin K;
25 WPI; 2001-657177/75.
26
27 Set of oligonucleotides, useful for diagnosis and cell typing, is
28 designed to detect single-nucleotide polymorphisms and cytosine
29 methylation status.
30
31 Claim 1; SEQ ID NO 222104; 29pp + Sequence Listing; German.
32
33 This invention describes novel oligonucleotide primers or peptide nucleic
34 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
35 and cytosine methylation status in chemically pretreated genomic DNA. The
36 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
37 range of diseases including immune system, gastrointestinal, respiratory,
38 central nervous system, cardiovascular and metabolic disorders. The
39 oligomers are also used for detecting cell type differentiation. ABC00010
40 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
41 represent the oligomers described in the invention. NOTE: The sequence
42 data for this patent did not form part of the printed specification, but
43 was obtained in electronic format from WIPO at
44 ftp.wipo.int/pub/published_pct_sequences
45
46 Sequence 13 BP; 7 A; 3 C; 0 G; 2 T; 0 U; 1 Other;
47
48 This invention describes novel oligonucleotide primers or peptide nucleic
49 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
50 and cytosine methylation status in chemically pretreated genomic DNA. The
51 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
52 range of diseases including immune system, gastrointestinal, respiratory,
53 central nervous system, cardiovascular and metabolic disorders. The
54 oligomers are also used for detecting cell type differentiation. ABC00010
55 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
56 represent the oligomers described in the invention. NOTE: The sequence
57 data for this patent did not form part of the printed specification, but
58 was obtained in electronic format from WIPO at
59 ftp.wipo.int/pub/published_pct_sequences
60
61 Sequence 13 BP; 7 A; 3 C; 0 G; 2 T; 0 U; 1 Other;
62
63 Query Match 13.7%; Score 10; DB 1; Length 13;
64 Best Local Similarity 83.3%; Pred. No. 1e+03;
65 Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
66
67 907 ATTTCCTTTGGT 918
68 ||||| |||||
69 12 ATTTCCTTTGGY 1
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100
101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
163
164
165
166
167
168
169
170
171
172
173
174
175
176
177
178
179
180
181
182
183
184
185
186
187
188
189
190
191
192
193
194
195
196
197
198
199
200
201
202
203
204
205
206
207
208
209
210
211
212
213
214
215
216
217
218
219
220
221
222
223
224
225
226
227
228
229
230
231
232
233
234
235
236
237
238
239
240
241
242
243
244
245
246
247
248
249
250
251
252
253
254
255
256
257
258
259
260
261
262
263
264
265
266
267
268
269
270
271
272
273
274
275
276
277
278
279
280
281
282
283
284
285
286
287
288
289
290
291
292
293
294
295
296
297
298
299
300
301
302
303
304
305
306
307
308
309
310
311
312
313
314
315
316
317
318
319
320
321
322
323
324
325
326
327
328
329
330
331
332
333
334
335
336
337
338
339
340
341
342
343
344
345
346
347
348
349
350
351
352
353
354
355
356
357
358
359
360
361
362
363
364
365
366
367
368
369
370
371
372
373
374
375
376
377
378
379
380
381
382
383
384
385
386
387
388
389
390
391
392
393
394
395
396
397
398
399
400
401
402
403
404
405
406
407
408
409
410
411
412
413
414
415
416
417
418
419
420
421
422
423
424
425
426
427
428
429
430
431
432
433
434
435
436
437
438
439
440
441
442
443
444
445
446
447
448
449
450
451
452
453
454
455
456
457
458
459
460
461
462
463
464
465
466
467
468
469
470
471
472
473
474
475
476
477
478
479
480
481
482
483
484
485
486
487
488
489
490
491
492
493
494
495
496
497
498
499
500
501
502
503
504
505
506
507
508
509
510
511
512
513
514
515
516
517
518
519
520
521
522
523
524
525
526
527
528
529
530
531
532
533
534
535
536
537
538
539
540
541
542
543
544
545
546
547
548
549
550
551
552
553
554
555
556
557
558
559
560
561
562
563
564
565
566
567
568
569
570
571
572
573
574
575
576
577
578
579
580
581
582
583
584
585
586
587
588
589
590
591
592
593
594
595
596
597
598
599
600
601
602
603
604
605
606
607
608
609
610
611
612
613
614
615
616
617
618
619
620
621
622
623
624
625
626
627
628
629
630
631
632
633
634
635
636
637
638
639
640
641
642
643
644
645
646
647
648
649
650
651
652
653
654
655
656
657
658
659
660
661
662
663
664
665
666
667
668
669
670
671
672
673
674
675
676
677
678
679
680
681
682
683
684
685
686
687
688
689
690
691
692
693
694
695
696
697
698
699
700
701
702
703
704
705
706
707
708
709
710
711
712
713
714
715
716
717
718
719
720
721
722
723
724
725
726
727
728
729
730
731
732
733
734
735
736
737
738
739
740
741
742
743
744
745
746
747
748
749
750
751
752
753
754
755
756
757
758
759
760
761
762
763
764
765
766
767
768
769
770
771
772
773
774
775
776
777
778
779
780
781
782
783
784
785
786
787
788
789
790
791
792
793
794
795
796
797
798
799
800
801
802
803
804
805
806
807
808
809
810
811
812
813
814
815
816
817
818
819
820
821
822
823
824
825
826
827
828
829
830
831
832
833
834
835
836
837
838
839
840
841
842
843
844
845
846
847
848
849
850
851
852
853
854
855
856
857
858
859
860
861
862
863
864
865
866
867
868
869
870
871
872
873
874
875
876
877
878
879
880
881
882
883
884
885
886
887
888
889
890
891
892
893
894
895
896
897
898
899
900
901
902
903
904
905
906
907
908
909
910
911
912
913
914
915
916
917
918
919
920
921
922
923
924
925
926
927
928
929
930
931
932
933
934
935
936
937
938
939
940
941
942
943
944
945
946
947
948
949
950
951
952
953
954
955
956
957
958
959
960
961
962
963
964
965
966
967
968
969
970
971
972
973
974
975
976
977
978
979
980
981
982
983
984
985
986
987
988
989
990
991
992
993
994
995
996
997
998
999
1000
1001
1002
1003
1004
1005
1006
1007
1008
1009
1010
1011
1012
1013
1014
1015
1016
1017
1018
1019
1020
1021
1022
1023
1024
1025
1026
1027
1028
1029
1030
1031
1032
1033
1034
1035
1036
1037
1038
1039
1040
1041
1042
1043
1044
1045
1046
1047
1048
1049
1050
1051
1052
1053
1054
1055
1056
1057
1058
1059
1060
1061
1062
1063
1064
1065
1066
1067
1068
1069
1070
1071
1072
1073
1074
1075
1076
1077
1078
1079
1080
1081
1082
1083
1084
1085
1086
1087
1088
1089
1090
1091
1092
1093
1094
1095
1096
1097
1098
1099
1100
1101
1102
1103
1104
1105
1106
1107
1108
1109
1110
1111
1112
1113
1114
1115
1116
1117
1118
1119
1120
1121
1122
1123
1124
1125
1126
1127
1128
1129
1130
1131
1132
1133
1134
1135
1136
1137
1138
1139
1140
1141
1142
1143
1144
1145
1146
1147
1148
1149
1150
1151
1152
1153
1154
1155
1156
1157
1158
1159
1160
1161
1162
1163
1164
1165
1166
1167
1168
1169
1170
1171
1172
1173
1174
1175
1176
1177
1178
1179
1180
1181
1182
1183
1184
1185
1186
1187
1188
1189
1190
1191
1192
1193
1194
1195
1196
1197
1198
1199
1200
1201
1202
1203
1204
1205
1206
1207
1208
1209
1210
1211
1212
1213
1214
1215
1216
1217
1218
1219
1220
1221
1222
1223
1224
1225
1226
1227
1228
1229
1230
1231
1232
1233
1234
1235
1236
1237
1238
1239
1240
1241
1242
1243
1244
1245
1246
1247
1248
1249
1250
1251
1252
1253
1254
1255
1256
1257
1258
1259
1260
1261
1262
1263
1264
1265
1266
1267
1268
1269
1270
1271
1272
1273
1274
1275
1276
1277
1278
1279
1280
1281
1282
1283
1284
1285
1286
1287
1288
1289
1290
1291
1292
1293
1294
1295
1296
1297
1298
1299
1300
1301
1302
1303
1304
1305
1306
1307
1308
1309
1310
1311
1312
1313
1314
1315
1316
1317
1318
1319
1320
1321
1322
1323
1324
1325
1326
1327
1328
1329
1330
1331
1332
1333
1334
1335
1336
1337
1338
1339
1340
1341
1342
1343
1344
1345
1346
1347
1348
1349
1350
1351
1352
1353
1354
1355
1356
1357
1358
1359
1360
1361
1362
1363
1364
1365
1366
1367
1368
1369
1370
1371
1372
1373
1374
1375
1376
1377
1378
1379
1380
1381
1382
1383
1384
1385
1386
1387
1388
1389
1390
1391
1392
1393
1394
1395
1396
1397
1398
1399
1400
1401
1402
1403
1404
1405
1406
1407
1408
1409
1410
1411
1412
1413
1414
1415
1416
1417
1418
1419
1420
1421
1422
1423
1424
1425
1426
1427
1428
1429
1430
1431
1432
1433
1434
1435
1436
1437
1438
1439
1440
1441
1442
1443
1444
1445
1446
1447
1448
1449
1450
1451
1452
1453
1454
1455
1456
1457
1458
1459
1460
1461
1462
1463
1464
1465
1466
1467
1468
1469
1470
1471
1472
1473
1474
1475
1476
1477
1478
1479
1480
1481
1482
1483
1484
1485
1486
1487
1488
1489
1490
1491
1492
1493
1494
1495
1496
1497
1498
1499
1500
1501
1502
1503
1504
1505
1506
1507
1508
1509
1510
1511
1512
1513
1514
1515
1516
1517
1518
1519
1520
1521
1522
1523
1524
1525
1526
1527
1528
1529
1530
1531
1532
1533
1534
1535
1536
1537
1538
1539
1540
1541
1542
1543
1544
1545
1546
1547
1548
1549
1550
1551
1552
1553
1554
1555
1556
1557
1558
1559
1560
1561
1562
1563
1564
1565
1566
1567
1568
1569
1570
1571
1572
1573
1574
1575
1576
1577
1578
1579
1580
1581
1582
1583
1584
1585
1586
1587
1588
1589
1590
1591
1592
1593
1594
1595
1596
1597
1598
1599
1600
1601
1602
1603
1604
1605
1606
1607
1608
1609
1610
1611
1612
1613
1614
1615
1616
1617
1618
1619
1620
1621
1622
1623
1624
1625
1626
1627
1628
1629
1630
1631
1632
1633
1634
1635
1636
1637
1638
1639
1640
1641
1642
1643
1644
1645
1646
1647
1648
1649
1650
1651
1652
1653
1654
1655
1656
1657
1658
1659
1660
1661
1662
1663
1664
1665
1666
1667
1668
1669
1670
1671
1672
1673
1674
1675
1676
1677
1678
1679
1680
1681
1682
1683
1684
1685
1686
1687
1688
1689
1690
1691
1692
1693
1694
1695
1696
1697
1698
1699
1700
1701
1702
1703
1704
1705
1706
1707
1708
1709
1710
1711
1712
1713
1714
1715
1716
1717
1718
1719
1720
1721
1722
1723
1724
1725
1726
1727
1728
1729
1730
1731
1732
1733
1734
1735
1736
1737
1738
1739
1740
1741
1742
1743
1744
1745
1746
1747
1748
1749
1750
1751
1752
1753
1754
1755
1756
1757
1758
1759
1760
1761
1762
1763
1764
1765
1766
1767
1768
1769
1770
1771
1772
1773
1774
1775
1776
1777
1778
1779
1780
1781
1782
1783
1784
1785
1786
1787
1788
1789
1790
1791
1792
1793
1794
1795
1796
1797
1798
1799
1800
1801
1802
1803
1804
1805
1806
1807
1808
1809
1810
1811
1812
1813
1814
1815
1816
1817
1818
1819
1820
1821
1822
1823
1824
1825
1826
1827
1828
1829
1830
1831
1832
1833
1834
1835
1836
1837
1838
1839
1840
1841
1842
1843
1844
1845
1846
1847
1848
1849
1850
1851
1852
1853
1854
1855
1856
1857
1858
1859
1860
1861
1862
1863
1864
1865
1866
1867
1868
1869
1870
1871
1872
1873
1874
1875
1876
1877
1878
1879
1880
1881
1882
1883
1884
1885
1886
1887
1888
1889
1890
1891
1892
1893
1894
1895
1896
1897
1898
1899
1900
1901
1902
1903
1904
1905
1906
1907
1908
1909
1910
1911
1912
1913
1914
1915
1916
1917
1918
1919
1920
1921
1922
1923
1924
1925
1926
1927
1928
1929
1930
1931
1932
1933
1934
1935
1936
1937
1938
1939
1940
1941
1942
1943
1944
1945
1946
1947
1948
1949
1950
1951
1952
1953
1954
1955
1956
1957
1958
1959
1960
1961
1962
1963
1964
1965
1966
1967
1968
1969
1970
1971
1972
1973
1974
1975
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
2026
2027
2028
2029
2030
2031
2032
2033
2034
2035
2036
2037
2038
2039
2040
2041
2042
2043
2044
2045
2046
2047
2048
2049
2050
2051
2052
2053
2054
2055
2056
2057
2058
2059
2060
2061
2062
2063
2064
2065
2066
2067
2068
2069
2070
2071
2072
2073
2074
2075
2076
2077
2078
2079
2080
2081
2082
2083
2084
2085
2086
2087
2088
2089
2090
2091
2092
2093
2094
2095
2096
2097
2098
2099
2100
2101
2102
2103
2104
2105
2106
2107
2108
2109
2110
2111
2112
2113
2114
2115
2116
2117
2118
2119
2120
2121
2122
2123
2124
2125
2126
2127
2128
2129
2130
2131
2132
2133
2134
2135
2136
2137
2138
2139
2140
2141
2142
2143
2144
2145
2146
2147
2148
2149
2150
2151
2152
2153
2154
2155
2156
2157
2158
2159
2160
2161
2162
2163
2164
2165
2166
2167
2168
2169
2170
2171
2172
2173
2174
2175
2176
2177
2178
2179
2180
2181
2182
2183
2184
2185
2186
2187
2188
2189
2190
2191
2192
2193
2194
2195
2196
2197
2198
2199
2200
2201
2202
2203
2204
2205
2206
2207
2208
2209
2210
2211
2212
2213
2214
2215
2216
2217
2218
2219
2220
2221
2222
2223
2224
2225
2226
2227
2228
2229
2230
2231
2232
2233
2234
2235
2236
2237
2238
2239
2240
2241
2242
2243
2244
2245
2246
2247
2248
2249
2250
2251
2252
2253
2254
2255
2256
2257
2258
2259
2260
2261
2262
2263
2264
2265
2266
2267
2268
2269
2270
2271
2272
2273
2274
2275
2276
2277
2278
2279
2280
2281
2282
2283
2284
2285
2286
2287
2288
2289
2290
2291
2292
2293
2294
2295
2296
2297
2298
2299
2300
2301
2302
2303
2304
2305
2306
2307
2308
2309
2310
2311
2312
2313
2314
2315
2316
2317
2318
2319
2320
2321
2322
2323
2324
2325
2326
2327
2328
2329
2330
2331
2332
2333
2334
2335
2336
2337
2338
2339
2340
2341
2342
2343
2344
2345
2346
2347
2348
2349
2350
2351
2352
2353
2354
2355
2356
2357
2358
2359
2360
2361
2362
2363
2364
2365
2366
2367
2368
2369
2370
2371
2372
2373
2374
2375
2376
2377
2378
2379
2380
2381
2382
2383
2384
2385
2386
2387
2388
2389
2390
2391
2392
2393
2394
2395
2396
2397
2398
2399
2400
2401
2402
2403
2404
2405
2406
2407
2408
2409
2410
2411
2412
2413
2414
2415
2416
2417
2418
2419
2420
2421
2422
2423
2424
2425
2426
2427
2428
2429
2430
2431
2432
2433
2434
2435
2436
2437
2438
2439
2440
2441
2442
2443
2444
2445
2446
2447
2448
2449
2450
2451
2452
2453
2454
2455
2456
2457
2458
2459
2460
2461
2462
2463
2464
2465
2466
2467
2468
2469
2470
2471
2472
2473
2474
2475
2476
2477
2478
2479
2480
2481
2482
2483
2484
2485
2486
2487
2488
2489
2490
2491
2492
2493
2494
2495
2496
2
```

DR WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 TT methylation status.
 XX
 XX Claim 1; SEQ ID NO 47711; 29pp + Sequence Listing; German.
 XX
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 XX Sequence 13 BP; 7 A; 0 C; 3 G; 3 T; 0 U; 0 Other;
 SQ
 Query Match 13.7%; Score 10; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 905 TCATTTTCCTT 914
 Db 13 TCATTTTCCTT 4
 RESULT 777
 ABC27054
 ID ABC27054 standard; DNA; 13 BP.
 AC ABC27054;
 XX
 XX 20-FEB-2002 (first entry)
 DT
 XX
 XX Oligonucleotide SEQ ID NO 27071 for detecting SNP TSC0007377.
 DE
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 XX Homo sapiens.
 CS
 XX WO200177384-A2.
 XX
 XX 18-OCT-2001.
 PD
 XX
 XX 06-APR-2001; 2001WO-IB000713.
 PF
 XX
 XX 07-APR-2000; 2000DE-01019173.
 PR
 XX (EPIG-) EPIGENOMICS AG.
 PA
 XX Olek A, Piepenbrock C, Berlin K;
 PI
 XX WPI; 2001-657177/75.
 DR
 XX
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 TT methylation status.
 XX
 XX Claim 1; SEQ ID NO 27071; 29pp + Sequence Listing; German.
 XX
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 XX Sequence 13 BP; 7 A; 0 C; 3 G; 3 T; 0 U; 0 Other;
 SQ
 Query Match 13.7%; Score 10; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 905 TCATTTTCCTT 914
 Db 13 TCATTTTCCTT 4

CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 XX Sequence 13 BP; 0 A; 0 C; 2 G; 10 T; 0 U; 1 Other;
 SQ
 Query Match 13.7%; Score 10; DB 1; Length 13;
 Best Local Similarity 83.3%; Pred. No. 1e+03;
 Matches 10; Conservative 1; Mismatches 0; Indels 1; Gaps 0;
 QY 908 TTTTCTTTGGTC 919
 Db 2 TTTTCTTTGGTY 13
 RESULT 778
 ABC88696
 ID ABC88696 standard; DNA; 13 BP.
 AC ABC88696;
 XX
 XX 21-FEB-2002 (first entry)
 DT
 XX
 XX Oligonucleotide SEQ ID NO 88713 for detecting SNP TSC0022295.
 DE
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 XX Homo sapiens.
 OS
 XX WO200177384-A2.
 PN
 XX
 XX 18-OCT-2001.
 PD
 XX
 XX 06-APR-2001; 2001WO-IB000713.
 PF
 XX
 XX 07-APR-2000; 2000DE-01019173.
 PR
 XX (EPIG-) EPIGENOMICS AG.
 PA
 XX Olek A, Piepenbrock C, Berlin K;
 PI
 XX WPI; 2001-657177/75.
 DR
 XX
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 TT methylation status.
 XX
 XX Claim 1; SEQ ID NO 88713; 29pp + Sequence Listing; German.
 XX
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 XX Sequence 13 BP; 3 A; 0 C; 1 G; 9 T; 0 U; 0 Other;
 SQ
 Query Match 13.7%; Score 10; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

PP 06-APR-2001; 2001WO-IB0000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 XX Claim 1; SEQ ID NO 180418; 29pp + Sequence Listing; German.
 PS
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;
 XX
 XX Query Match 13.7%; Score 10; DB 1; Length 13;
 XX Best Local Similarity 100.0%; Pred. No. 1e+03;
 XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 948 TTTAATGTAT 957
 DB 13 TTTAATGTAT 4
 RESULT 782
 ID ABH54691/C
 XX ABH54691 standard; DNA; 13 BP.
 XX AC ABH54691;
 XX DT 22-FEB-2002 (first entry)
 XX DE Oligonucleotide SEQ ID NO 254668 for detecting SNP TSC0062076.
 XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX OS Homo sapiens.
 XX PN WO200177384-A2.
 XX PD 18-OCT-2001.
 XX PF 06-APR-2001; 2001WO-IB0000713.
 XX PR 07-APR-2000; 2000DE-01019173.
 XX PA (EPIG-) EPIGENOMICS AG.
 XX PI Olek A, Piepenbrock C, Berlin K;
 XX DR WPI; 2001-657177/75.
 XX PN WO200177384-A2.
 XX PD 18-OCT-2001.
 XX PF 06-APR-2001; 2001WO-IB0000713.
 XX PR 07-APR-2000; 2000DE-01019173.
 XX PA (EPIG-) EPIGENOMICS AG.
 XX PI Olek A, Piepenbrock C, Berlin K;
 XX DR WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.

XX Claim 1; SEQ ID NO 254668; 29pp + Sequence Listing; German.
 PS
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 7 A; 1 C; 0 G; 4 T; 0 U; 1 Other;
 XX
 XX Query Match 13.7%; Score 10; DB 1; Length 13;
 XX Best Local Similarity 100.0%; Pred. No. 1e+03;
 XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 948 TTTAATGTAT 957
 DB 13 TTTAATGTAT 4
 RESULT 783
 ID ABC52262/C
 XX ABC52262 standard; DNA; 13 BP.
 XX AC ABC52262;
 XX DT 21-FEB-2002 (first entry)
 XX DE Oligonucleotide SEQ ID NO 52279 for detecting SNP TSC0014529.
 XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX OS Homo sapiens.
 XX PN WO200177384-A2.
 XX PD 18-OCT-2001.
 XX PF 06-APR-2001; 2001WO-IB0000713.
 XX PR 07-APR-2000; 2000DE-01019173.
 XX PA (EPIG-) EPIGENOMICS AG.
 XX PI Olek A, Piepenbrock C, Berlin K;
 XX DR WPI; 2001-657177/75.
 XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 52279; 29pp + Sequence Listing; German.
 XX
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but

```

; was obtained in electronic format from WIPO at
; ftp.wipo.int/pub/published_pct_sequences
;
; Sequence 13 BP; 8 A; 0 C; 2 G; 2 T; 0 U; 1 Other;
;
Query Match      13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

/ 905 TCATTTCCT 914
) 10 TCATTTCCT 1
|||||
|

RESULT 784
ABF13833/c
) ABC88697 standard; DNA; 13 BP.
(
( ABC88697;
(
( 21-FEB-2002 (first entry)
(
( Oligonucleotide SEQ ID NO 89714 for detecting SNP TSC0022295.
(
( SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
( peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
( central nervous system; gastrointestinal; respiratory; immune; metabolic.
(
( Homo sapiens.
(
( WO200177384-A2.
(
( 18-OCT-2001.
(
( 06-APR-2001; 2001WO-IB000713.
(
( 07-APR-2000; 2000DE-01019173.
(
( (EPIC-) EPIGENOMICS AG.
(
( Olek A, Piepenbrock C, Berlin K;
(
( WPI; 2001-657177/75.
(
( Set of oligonucleotides, useful for diagnosis and cell typing, is
( designed to detect single-nucleotide polymorphisms and cytosine
( methylation status.
(
( Claim 1; SEQ ID NO 89714; 29pp + Sequence Listing; German.
(
( This invention describes novel oligonucleotide primers or peptide nucleic
( acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
( and cytosine methylation status in chemically pretreated genomic DNA. The
( oligonucleotides are used for diagnosis and/or prognosis of cancer and a
( range of diseases including immune system, gastrointestinal, respiratory,
( central nervous system, cardiovascular and metabolic disorders. The
( oligomers are also used for detecting cell type differentiation. ABC00010
( -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ASI00010-ASI82073
( represent the oligomers described in the invention. NOTE: The sequence
( data for this patent did not form part of the printed specification, but
( was obtained in electronic format from WIPO at
( ftp.wipo.int/pub/published_pct_sequences
(
( Sequence 13 BP; 9 A; 1 C; 0 G; 3 T; 0 U; 0 Other;
(
Query Match      13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

/ 948 TTTAATGTAT 957
) 12 TTTAATGTAT 3
|||||
|

; was obtained in electronic format from WIPO at
; ftp.wipo.int/pub/published_pct_sequences
;
; Sequence 13 BP; 8 A; 0 C; 2 G; 2 T; 0 U; 1 Other;
;
Query Match      13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 83.3%; Pred. No. 1e+03;
Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 923 GCCTTTTATCCC 934
DB 1 RCCTATTATCCC 12
|||||
|

RESULT 786
ABF25029/c
ID ABF25029 standard; DNA; 13 BP.
XX
XX AC ABF25029;
XX
XX DT 21-FEB-2002 (first entry)
XX
XX DE Oligonucleotide SEQ ID NO 125026 for detecting SNP TSC0031242.
XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;

```

KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
CS WO200177384-A2.
XX 18-OCT-2001.
XX
FF 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 125026; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 6 A; 4 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 945 TGGTTTAATG 954
DB 11 TGGTTTAATG 2
|||||
|
RESULT 787
ABF26974
ID ABF26974 standard; DNA; 13 BP.
XX
XX ABF26974;
AC
XX 21-FEB-2002 (first entry)
DT
XX Oligonucleotide SEQ ID NO 126971 for detecting SNP TSC0031781.
DE
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
OS
XX WO200177384-A2.
FN
XX 18-OCT-2001.
PD
XX
XX 06-APR-2001; 2001WO-IB000713.
FF
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
PA

XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 126971; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 3 A; 0 C; 2 G; 7 T; 0 U; 1 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 83.3%; Pred. No. 1e+03;
Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 947 GTTTAATGATC 958
DB 2 GTTTAATGTTT 13
|||||
|
RESULT 788
ABF26975/c
ID ABF26975 standard; DNA; 13 BP.
XX
XX ABF26975;
AC
XX 21-FEB-2002 (first entry)
DT
XX Oligonucleotide SEQ ID NO 126972 for detecting SNP TSC0031781.
DE
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
OS
XX WO200177384-A2.
FN
XX 18-OCT-2001.
PD
XX
XX 06-APR-2001; 2001WO-IB000713.
FF
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
PA
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 126972; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABF9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 7 A; 2 C; 0 G; 3 T; 0 U; 1 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 83.3%; Pred. No. 1e+03;
Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

947 GTTAAATGATC 958
|||||||
12 GTTAAATGTTT 1

RESULT 789

ABF35913/C

ABF35913 standard; DNA; 13 BP.

ABF35913;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 135910 for detecting SNP TSC0033934.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB0000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 135910; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABF9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 5 A; 4 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

947 GTTAAATGTA 956
|||||||
13 GTTAAATGTA 4

RESULT 790

ABH22125/C

ABH22125 standard; DNA; 13 BP.

ABH22125;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 222102 for detecting SNP TSC0054046.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB0000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 222102; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABF9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 8 A; 2 C; 0 G; 2 T; 0 U; 1 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 83.3%; Pred. No. 1e+03;
Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

907 ATTTCCTTGGT 918
|||||||
12 ATTTCCTTGGT 1

RESULT 791

ABH02152/C

ABH02152 standard; DNA; 13 BP.

XX

```
AC ABH02152;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 202129 for detecting SNP TSC0049691.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
EN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PF Claim 1; SEQ ID NO 202129; 29pp + Sequence Listing; German.
XX
PR This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 9 A; 0 C; 2 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 13.7%; Score 10; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1e+03;
XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 906 CATTTTCTTT 915
DB 13 CATTTTCTTT 4
XX
RESULT 792
ABH04495/C
ID ABH04495 standard; DNA; 13 BP.
XX
AC ABH04495;
XX
XX 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 204472 for detecting SNP TSC0050159.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
```

```
XX 18-OCT-2001.
PD
XX 06-APR-2001; 2001WO-IB000713.
PF
XX 07-APR-2000; 2000DE-01019173.
PR
XX (EPIG-) EPIGENOMICS AG.
PA
XX Olek A, Piepenbrock C, Berlin K;
PI
XX WPI; 2001-657177/75.
DR
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PF Claim 1; SEQ ID NO 204472; 29pp + Sequence Listing; German.
XX
PR This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 13.7%; Score 10; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1e+03;
XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 947 GTTTAAATGTA 956
DB 12 GTTTAAATGTA 3
XX
RESULT 793
ABH59078/C
ID ABH59078 standard; DNA; 13 BP.
XX
AC ABH59078;
XX
XX 22-FEB-2002 (first entry)
DT
XX Oligonucleotide SEQ ID NO 259055 for detecting SNP TSC0007540.
DE
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
XX 18-OCT-2001.
PD
XX 06-APR-2001; 2001WO-IB000713.
PF
XX 07-APR-2000; 2000DE-01019173.
PR
XX (EPIG-) EPIGENOMICS AG.
PA
XX Olek A, Piepenbrock C, Berlin K;
PI
XX WPI; 2001-657177/75.
DR
XX
```

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 259055; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and AB100010-AB182073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 5 A; 1 C; 2 G; 4 T; 0 U; 1 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 83.3%; Pred. No. 1e+03;
Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

947 GTTAAATGATC 958
:|||||
13 RTTAAAGTATC 2

RESULT 794
ABC19221/c
ABC19221 standard; DNA; 13 BP.

ABC19221;

20-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 19238 for detecting SNP TSC0004017.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB0000713.

07-APR-2000; 2000DE-01019173.

(EPTG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 19238; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010

CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and AB100010-AB182073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 8 A; 1 C; 0 G; 4 T; 0 U; 0 Other;
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 948 TTTAATGATAT 957
|||||
11 TTTAATGATAT 2

Db

RESULT 795
ABC44938
ID ABC44938 standard; DNA; 13 BP.

XX
AC ABC44938;

XX
DT 21-FEB-2002 (first entry)

XX
Oligonucleotide SEQ ID NO 44955 for detecting SNP TSC0013151.

XX
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

OS Homo sapiens.

XX
WO200177384-A2.

XX
18-OCT-2001.

XX
06-APR-2001; 2001WO-IB0000713.

XX
07-APR-2000; 2000DE-01019173.

XX
(EPTG-) EPIGENOMICS AG.

PI Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.

XX
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.

XX
Claim 1; SEQ ID NO 44955; 29pp + Sequence Listing; German.

XX
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligomers are also used for detecting cell type differentiation. ABC00010
-ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and AB100010-AB182073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 4 A; 0 C; 2 G; 6 T; 0 U; 1 Other;
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 947 GTTAAATGTA 956

```

20      |||||
      1 GTTTAATGTA 10

RESULT 796
ABC45855/c
ID ABC45855 standard; DNA; 13 BP.
XX
AC ABC45855;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 45872 for detecting SNP TSC0013320.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
PI WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 45872; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 6 A; 3 C; 0 G; 4 T; 0 U; 0 Other;
XX
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 947 GTTTAATGTA 956
Db 13 GTTTAATGTA 4

RESULT 797
ABC50965/c
ID ABC50965 standard; DNA; 13 BP.
XX
AC ABC50965;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 50982 for detecting SNP TSC0014267.
XX
```

```

XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
PI WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 50982; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 5 A; 2 C; 0 G; 5 T; 0 U; 1 Other;
XX
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 947 GTTTAATGTA 956
Db 13 GTTTAATGTA 4

RESULT 798
ABC03477
ID ABC03477 standard; DNA; 13 BP.
XX
AC ABC03477;
XX
DT 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 3468 for detecting SNP TSC0001294.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
```

```

1 07-APR-2000; 2000DE-01019173.
2 (EPIG-) EPIGENOMICS AG.
3 Olek A, Piepenbrock C, Berlin K;
4 WPI; 2001-657177/75.
5 Set of oligonucleotides, useful for diagnosis and cell typing, is
6 designed to detect single-nucleotide polymorphisms and cytosine
7 methylation status.
8 Claim 1; SEQ ID NO 3468; 29pp + Sequence Listing; German.
9 This invention describes novel oligonucleotide primers or peptide nucleic
10 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
11 and cytosine methylation status in chemically pretreated genomic DNA. The
12 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
13 range of diseases including immune system, gastrointestinal, respiratory,
14 central nervous system, cardiovascular and metabolic disorders. The
15 oligomers are also used for detecting cell type differentiation. ABC00010
16 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
17 represent the oligomers described in the invention. NOTE: The sequence
18 data for this patent did not form part of the printed specification, but
19 was obtained in electronic format from WIPO at
20 ftp.wipo.int/pub/published_pct_sequences
21 Sequence 13 BP; 2 A; 2 C; 0 G; 9 T; 0 U; 0 Other;
22
23 Query Match 13.7%; Score 10; DB 1; Length 13;
24 Best Local Similarity 100.0%; Pred. No. 1e+03;
25 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
26
27 906 CATTTCCTTT 915
28 1 CATTTCCTTT 10
29
30 RESULT 799
31 ABC55957/C
32 ABC55957 standard; DNA; 13 BP.
33 ABC55957;
34 21-FEB-2002 (first entry)
35 Oligonucleotide SEQ ID NO 55974 for detecting SNP TSC0015229.
36 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
37 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
38 central nervous system; gastrointestinal; respiratory; immune; metabolic.
39 Homo sapiens.
40 WO200177384-A2.
41 18-OCT-2001.
42 06-APR-2001; 2001WO-IB0000713.
43 07-APR-2000; 2000DE-01019173.
44 (EPIG-) EPIGENOMICS AG.
45 Olek A, Piepenbrock C, Berlin K;
46 WPI; 2001-657177/75.
47 Set of oligonucleotides, useful for diagnosis and cell typing, is
48 designed to detect single-nucleotide polymorphisms and cytosine
49 methylation status.
50 Claim 1; SEQ ID NO 55974; 29pp + Sequence Listing; German.

```

```

XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 8 A; 1 C; 0 G; 4 T; 0 U; 0 Other;
23
24 Query Match 13.7%; Score 10; DB 1; Length 13;
25 Best Local Similarity 100.0%; Pred. No. 1e+03;
26 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
27
28 QY 948 TTTAATGTAT 957
29 12 TTTAATGTAT 3
30 Db
31
32 RESULT 800
33 ABF09290
34 ID ABF09290 standard; DNA; 13 BP.
35 XX
36 AC ABF09290;
37 XX
38 DT 21-FEB-2002 (first entry)
39 XX
40 DE Oligonucleotide SEQ ID NO 109287 for detecting SNP TSC0027337.
41 XX
42 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
43 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
44 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
45 XX
46 OS Homo sapiens.
47 XX
48 PN WO200177384-A2.
49 XX
50 PD 18-OCT-2001.
51 XX
52 PF 06-APR-2001; 2001WO-IB0000713.
53 XX
54 PR 07-APR-2000; 2000DE-01019173.
55 XX
56 PA (EPIG-) EPIGENOMICS AG.
57 XX
58 PI Olek A, Piepenbrock C, Berlin K;
59 XX
60 DR WPI; 2001-657177/75.
61 XX
62 PT Set of oligonucleotides, useful for diagnosis and cell typing, is
63 PT designed to detect single-nucleotide polymorphisms and cytosine
64 PT methylation status.
65 XX
66 PS Claim 1; SEQ ID NO 109287; 29pp + Sequence Listing; German.
67 XX
68 CC This invention describes novel oligonucleotide primers or peptide nucleic
69 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
70 CC and cytosine methylation status in chemically pretreated genomic DNA. The
71 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
72 CC range of diseases including immune system, gastrointestinal, respiratory,
73 CC central nervous system, cardiovascular and metabolic disorders. The
74 CC oligomers are also used for detecting cell type differentiation. ABC00010
75 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
76 CC represent the oligomers described in the invention. NOTE: The sequence
77 CC data for this patent did not form part of the printed specification, but
78 CC was obtained in electronic format from WIPO at
79 CC ftp.wipo.int/pub/published_pct_sequences

```



```
XX
SQ Sequence 13 BP; 1 A; 1 C; 4 G; 6 T; 0 U; 1 Other;

Query Match      13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 83.3%; Pred. No. 1e+03;
Matches 10; Conservative 1; Mismatches 0; Gaps 0;

QY 907 ATTTCTCTTGGT 918
DB 2 ATTTCTCTTGGY 13
|||||
|||||

RESULT 801
ABF09291/c
ID ABF09291 standard; DNA; 13 BP.
XX
AC ABF09291;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 109288 for detecting SNP TSC0027337.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 109288; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 6 A; 4 C; 1 G; 1 T; 0 U; 1 Other;

Query Match      13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 83.3%; Pred. No. 1e+03;
Matches 10; Conservative 1; Mismatches 0; Gaps 0;

QY 907 ATTTCTCTTGGT 918
DB 12 ATTTCTCTTGGY 1
|||||
|||||

RESULT 802
ABF09291/c
ID ABF09291 standard; DNA; 13 BP.
XX
AC ABF74916;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 174913 for detecting SNP TSC0043493.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
```

```
ABC35308/c
ID ABC35308 standard; DNA; 13 BP.
XX
AC ABC35308;
XX
DT 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 35325 for detecting SNP TSC0011192.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 35325; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 4 A; 0 C; 5 G; 3 T; 0 U; 1 Other;

Query Match      13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 83.3%; Pred. No. 1e+03;
Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 923 GCCTTTTATCCC 934
DB 13 RCCATTATCCC 2
|||||
|||||

RESULT 803
ABF74916
ID ABF74916 standard; DNA; 13 BP.
XX
AC ABF74916;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 174913 for detecting SNP TSC0043493.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
```

```

Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 174913; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABR00010-ABR99989
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 4 A; 0 C; 1 G; 8 T; 0 U; 0 Other;
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

948 TTTAATGTAT 957
|||||
1 TTTAATGTAT 10

SULT 804
BF52555
ABF52555 standard; DNA; 13 BP.
ABF52555;
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 152552 for detecting SNP TSC0038555.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;

Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 204310; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABR00010-ABR99989
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 4 A; 5 C; 0 G; 4 T; 0 U; 0 Other;
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 934 CTCCTCTTCA 943
|||||
3 CTCCTCTTCA 12

Db

RESULT 805
ABH04333
ID ABH04333 standard; DNA; 13 BP.
XX
AC ABH04333;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 204310 for detecting SNP TSC0050117.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
WPI; 2001-657177/75.
XX
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 204310; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABR00010-ABR99989
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

```



```

20-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 26081 for detecting SNP TSC0006747.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPiG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 26081; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 8 A; 0 C; 3 G; 2 T; 0 U; 0 Other;
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03; Indels 0; Gaps 0;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
906 CATTTCCTTT 915
|||||||
11 CATTTCCTTT 2
SULT 809
CS0964
ABC50964 standard; DNA; 13 BP.
ABC50964;
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 50981 for detecting SNP TSC0014267.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPiG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 50981; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 5 A; 0 C; 2 G; 5 T; 0 U; 1 Other;
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03; Indels 0; Gaps 0;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 947 GTTTAATGTA 956
|||||||
Db 1 GTTTAATGTA 10
RESULT 810
ABF32039/c
ID ABF32039 standard; DNA; 13 BP.
XX
AC ABF32039;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 132036 for detecting SNP TSC0032957.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPiG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
XX
PS Claim 1; SEQ ID NO 50981; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 5 A; 0 C; 2 G; 5 T; 0 U; 1 Other;
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03; Indels 0; Gaps 0;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 947 GTTTAATGTA 956
|||||||
Db 1 GTTTAATGTA 10

```

PT methylation status.
XX
P3 Claim 1; SEQ ID NO 132036; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 8 A; 2 C; 0 G; 2 T; 0 U; 1 Other;
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03; Indels 0; Gaps 0;
Matches 10; Conservative 0; Mismatches 0;
CY 944 TTGGTTTAAT 953
| | | | |
Db 12 TTGGTTTAAT 3
RESULT 811
ABF69465/C
ID ABF69465 standard; DNA; 13 BP.
XX
AC ABF69465;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 169462 for detecting SNP TSC0042329.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XN WO200177384-A2.
XX
FD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
FA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 169462; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 8 A; 2 C; 0 G; 2 T; 0 U; 1 Other;
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03; Indels 0; Gaps 0;
Matches 10; Conservative 0; Mismatches 0;
CY 944 TTGGTTTAAT 953
| | | | |
Db 12 TTGGTTTAAT 3

CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 8 A; 2 C; 0 G; 2 T; 0 U; 1 Other;
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 83.3%; Pred. No. 1e+03; Indels 0; Gaps 0;
Matches 10; Conservative 1; Mismatches 0;
CY 944 TTGGTTTAATGT 955
| | | | |
Db 12 TTGGTTTAATGY 1
RESULT 812
ABC52263
ID ABC52263 standard; DNA; 13 BP.
XX
AC ABC52263;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 52280 for detecting SNP TSC0014529.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XN WO200177384-A2.
XX
FD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
FA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 52280; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 2 A; 2 C; 0 G; 8 T; 0 U; 1 Other;
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03; Indels 0; Gaps 0;
Matches 10; Conservative 0; Mismatches 0;
CY 905 TCATTTTCTT 914
| | | | |
Db 4 TCATTTTCTT 13

```

>SULT 813
>C27473/c
> ) ABC27473 standard; DNA; 13 BP.
> )
> ) ABC27473;
> )
> ) 20-FEB-2002 (first entry)
> )
> ) Oligonucleotide SEQ ID NO 27490 for detecting SNP TSC0007640.
> )
> ) SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
> ) peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
> ) central nervous system; gastrointestinal; respiratory; immune; metabolic.
> )
> ) Homo sapiens.
> )
> ) WO200177384-A2.
> )
> ) 18-OCT-2001.
> )
> ) 06-APR-2001; 2001WO-IB000713.
> )
> ) 07-APR-2000; 2000DE-01019173.
> )
> ) (EPIG-) EPIGENOMICS AG.
> )
> ) Olek A, Piepenbrock C, Berlin K;
> )
> ) WPI; 2001-657177/75.
> )
> ) Set of oligonucleotides, useful for diagnosis and cell typing, is
> ) designed to detect single-nucleotide polymorphisms and cytosine
> ) methylation status.
> )
> ) Claim 1; SEQ ID NO 27490; 29pp + Sequence Listing; German.
> )
> ) This invention describes novel oligonucleotide primers or peptide nucleic
> ) acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
> ) and cytosine methylation status in chemically pretreated genomic DNA. The
> ) oligonucleotides are used for diagnosis and/or prognosis of cancer and a
> ) range of diseases including immune system, gastrointestinal, respiratory,
> ) central nervous system, cardiovascular and metabolic disorders. The
> ) oligomers are also used for detecting cell type differentiation. ABC00010
> ) -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
> ) represent the oligomers described in the invention. NOTE: The sequence
> ) data for this patent did not form part of the printed specification, but
> ) was obtained in electronic format from WIPO at
> ) ftp.wipo.int/pub/published_pct_sequences
> )
> ) Sequence 13 BP; 8 A; 1 C; 0 G; 3 T; 0 U; 1 Other;
> )
> ) This invention describes novel oligonucleotide primers or peptide nucleic
> ) acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
> ) and cytosine methylation status in chemically pretreated genomic DNA. The
> ) oligonucleotides are used for diagnosis and/or prognosis of cancer and a
> ) range of diseases including immune system, gastrointestinal, respiratory,
> ) central nervous system, cardiovascular and metabolic disorders. The
> ) oligomers are also used for detecting cell type differentiation. ABC00010
> ) -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
> ) represent the oligomers described in the invention. NOTE: The sequence
> ) data for this patent did not form part of the printed specification, but
> ) was obtained in electronic format from WIPO at
> ) ftp.wipo.int/pub/published_pct_sequences
> )
> ) Sequence 13 BP; 8 A; 1 C; 0 G; 3 T; 0 U; 1 Other;
> )
> ) Query Match 13.7%; Score 10; DB 1; Length 13;
> ) Best Local Similarity 100.0%; Pred. No. 1e+03;
> ) Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
> )
> ) 948 TTTAATGTAT 957
> ) |||||
> ) 12 TTTAATGTAT 3
> )
> ) RESULT 814
> ) C31700/c
> ) ) ABC31700 standard; DNA; 13 BP.
> ) )
> ) ) ABC31700;
> ) )
> ) ) 20-FEB-2002 (first entry)
> ) )
> ) ) Oligonucleotide SEQ ID NO 31717 for detecting SNP TSC0009885.
> ) )
> ) ) SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
> ) ) peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
> ) ) central nervous system; gastrointestinal; respiratory; immune; metabolic.
> ) )
> ) ) Homo sapiens.
> ) )
> ) ) WO200177384-A2.
> ) )
> ) ) 18-OCT-2001.
> ) )
> ) ) 06-APR-2001; 2001WO-IB000713.
> ) )
> ) ) 07-APR-2000; 2000DE-01019173.
> ) )
> ) ) (EPIG-) EPIGENOMICS AG.
> ) )
> ) ) Olek A, Piepenbrock C, Berlin K;
> ) )
> ) ) WPI; 2001-657177/75.
> ) )
> ) ) Set of oligonucleotides, useful for diagnosis and cell typing, is
> ) designed to detect single-nucleotide polymorphisms and cytosine
> ) methylation status.
> )
> ) Claim 1; SEQ ID NO 27490; 29pp + Sequence Listing; German.
> )
> ) This invention describes novel oligonucleotide primers or peptide nucleic
> ) acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
> ) and cytosine methylation status in chemically pretreated genomic DNA. The
> ) oligonucleotides are used for diagnosis and/or prognosis of cancer and a
> ) range of diseases including immune system, gastrointestinal, respiratory,
> ) central nervous system, cardiovascular and metabolic disorders. The
> ) oligomers are also used for detecting cell type differentiation. ABC00010
> ) -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
> ) represent the oligomers described in the invention. NOTE: The sequence
> ) data for this patent did not form part of the printed specification, but
> ) was obtained in electronic format from WIPO at
> ) ftp.wipo.int/pub/published_pct_sequences
> )
> ) Sequence 13 BP; 8 A; 1 C; 0 G; 3 T; 0 U; 1 Other;
> )
> ) Query Match 13.7%; Score 10; DB 1; Length 13;
> ) Best Local Similarity 100.0%; Pred. No. 1e+03;
> ) Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
> )
> ) 905 TCATTTTCTT 914
> ) |||||
> ) 10 TCATTTTCTT 1
> )
> ) RESULT 815
> ) ABF13832/c
> ) ID ABF13832 standard; DNA; 13 BP.
> )
> ) AC ABF13832;
> )
> ) XX 21-FEB-2002 (first entry)
> )
> ) XX Oligonucleotide SEQ ID NO 113829 for detecting SNP TSC0028504.
> )
> ) XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
> ) XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
> ) XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
> )
> ) XX Homo sapiens.
> )
> ) XX WO200177384-A2.
> )
> ) XX 18-OCT-2001.
> )
> ) XX 06-APR-2001; 2001WO-IB000713.
> )
> ) XX 07-APR-2000; 2000DE-01019173.
> )
> ) XX

```

PA (EPIG-) EPIGENOMICS AG.
PI Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 113829; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 4 A; 1 C; 5 G; 2 T; 0 U; 1 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 83.3%; Pred. No. 1e+03;
Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 923 GCCTTTTATCCC 934
Db :||| |||||
13 KCCTATTATCCC 2

RESULT 816
A3F18108
ID ABF18108 standard; DNA; 13 BP.
AC ABF18108;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 118105 for detecting SNP TSC0029535.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 118105; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic

CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 1 A; 0 C; 3 G; 8 T; 0 U; 1 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 83.3%; Pred. No. 1e+03;
Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 907 ATTTTCTTTGGT 918
Db ||||| |||||
2 ATTTGTTTGGY 13

RESULT 817
ABH25090/C
ID ABH25090 standard; DNA; 13 BP.
AC ABH25090;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 225067 for detecting SNP TSC0054876.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 225067; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 4 A; 1 C; 4 G; 4 T; 0 U; 0 Other;

```
Query Match      13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

      955 TATCGCTACC 964
      |||||
      10 TATCGCTACC 1

RESULT 818
ABH04673
ABH04673 standard; DNA; 13 BP.
ABH04673;
22-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 204650 for detecting SNP TSC0050210.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB0000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 204650; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligomers are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 4 A; 2 C; 0 G; 7 T; 0 U; 0 Other;
Query Match      13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

      905 TCATTTCCTT 914
      |||||
      1 TCATTTCCTT 10

RESULT 819
ABH04673/c
ABH04673 standard; DNA; 13 BP.

XX ABH61067;
XX AC
XX 22-FEB-2002 (first entry)
XX Oligonucleotide SEQ ID NO 261044 for detecting SNP TSC0063384.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB0000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 261044; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 5 A; 4 C; 0 G; 4 T; 0 U; 0 Other;
XX Query Match      13.7%; Score 10; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1e+03;
XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 943 ATTGCTTTAA 952
DB 10 ATTGCTTTAA 1

RESULT 820
ABC27472
ABC27472 standard; DNA; 13 BP.
XX AC ABC27472;
XX 20-FEB-2002 (first entry)
XX Oligonucleotide SEQ ID NO 27489 for detecting SNP TSC0007640.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX
```



```

FN WO200177384-A2.
XX
XX
PD 18-OCT-2001.
XX
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
XX
PR 07-APR-2000; 2000DE-01019173.
XX
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX
FS Claim 1; SEQ ID NO 27489; 29pp + Sequence Listing; German.
XX
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ASC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX
SQ Sequence 13 BP; 3 A; 0 C; 1 G; 8 T; 0 U; 1 Other;
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 948 TTTAATGTAT 957
Db 2 TTTAATGTAT 11
|||||

RESULT 821
ABC86879/C
ID ABC86879 standard; DNA; 13 BP.
XX
XX
AC ABC86879;
XX
XX
DT 21-FEB-2002 (first entry)
XX
XX
DE Oligonucleotide SEQ ID NO 86896 for detecting SNP TSC0021828.
XX
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX
OS Homo sapiens.
XX
XX
PN WO200177384-A2.
XX
XX
PD 18-OCT-2001.
XX
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
XX
PR 07-APR-2000; 2000DE-01019173.
XX
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
XX
DR WPI; 2001-657177/75.
XX
XX
DR WO200177384-A2.
XX
XX
PD 18-OCT-2001.
XX
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
XX
PR 07-APR-2000; 2000DE-01019173.
XX
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
XX
DR WPI; 2001-657177/75.

```

```

XX
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX
PS Claim 1; SEQ ID NO 86896; 29pp + Sequence Listing; German.
XX
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ASC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX
SQ Sequence 13 BP; 6 A; 2 C; 0 G; 5 T; 0 U; 0 Other;
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 947 GTTTAATGTA 956
Db 12 GTTTAATGTA 3
|||||

RESULT 822
ABH20195
ID ABH20195 standard; DNA; 13 BP.
XX
XX
AC ABH20195;
XX
XX
DT 22-FEB-2002 (first entry)
XX
XX
DE Oligonucleotide SEQ ID NO 220172 for detecting SNP TSC0053577.
XX
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX
OS Homo sapiens.
XX
XX
PN WO200177384-A2.
XX
XX
PD 18-OCT-2001.
XX
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
XX
PR 07-APR-2000; 2000DE-01019173.
XX
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
XX
DR WPI; 2001-657177/75.
XX
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX
PS Claim 1; SEQ ID NO 220172; 29pp + Sequence Listing; German.
XX
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The

```

oligomers are also used for detecting cell type differentiation. ABC00010
-ABG99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 1 A; 5 C; 0 G; 7 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

925 CTTTATCCC 934

1 CTTTATCCC 10

RESULT 823

3H23313/C

ABH23313 standard; DNA; 13 BP.

ABH23313;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 223290 for detecting SNP TSC0005484.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.

Claim 1; SEQ ID NO 223290; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligomers are also used for detecting cell type differentiation. ABC00010
-ABG99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 7 A; 2 C; 0 G; 3 T; 0 U; 1 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 83.3%; Pred. No. 1e+03;
Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 907 ATTTCTTTGGT 918

12 ATTTATTGGY 1

RESULT 824

ABC71246/C

ABC71246 standard; DNA; 13 BP.

ABC71246;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 71263 for detecting SNP TSC0018464.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.

Claim 1; SEQ ID NO 71263; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligomers are also used for detecting cell type differentiation. ABC00010
-ABG99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 5 A; 0 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 931 TCCCTCCTCT 940

13 TCCCTCCTCT 4

RESULT 825

ABF18109/C

ABF18109 standard; DNA; 13 BP.

ABF18109;

21-FEB-2002 (first entry)

XX

DE Oligonucleotide SEQ ID NO 118106 for detecting SNP TSC0029535.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 XX WO200177384-A2.
 XX 18-OCT-2001.
 PD 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 PA Olek A, Piepenbrock C, Berlin K;
 FI WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 118106; 29pp + Sequence Listing; German.
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX SQ Sequence 13 BP; 8 A; 3 C; 0 G; 1 T; 0 U; 1 Other;
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX SQ Sequence 13 BP; 8 A; 3 C; 0 G; 1 T; 0 U; 1 Other;
 Query Match 13.7%; Score 10; DB 1; Length 13;
 Best Local Similarity 83.3%; Pred. No. 1e+03;
 Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
 CY 907 ATTTTCCTTTGGT 918
 DB 12 ATTTTGTGGY 1
 RESULT 826
 ABF18585/c
 ID ABF18585 standard; DNA; 13 BP.
 XX ABF18585;
 XX 21-FEB-2002 (first entry)
 XX Oligonucleotide SEQ ID NO 118582 for detecting SNP TSC0029619.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 XX WO200177384-A2.
 XX 18-OCT-2001.
 PD 06-APR-2001; 2001WO-IB000713.
 XX (EPIG-) EPIGENOMICS AG.
 PA Olek A, Piepenbrock C, Berlin K;
 FI WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 118106; 29pp + Sequence Listing; German.
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX SQ Sequence 13 BP; 8 A; 3 C; 0 G; 1 T; 0 U; 1 Other;
 Query Match 13.7%; Score 10; DB 1; Length 13;
 Best Local Similarity 83.3%; Pred. No. 1e+03;
 Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
 CY 907 ATTTTCCTTTGGT 918
 DB 12 ATTTTGTGGY 1
 RESULT 826
 ABF18585/c
 ID ABF18585 standard; DNA; 13 BP.
 XX ABF18585;
 XX 21-FEB-2002 (first entry)
 XX Oligonucleotide SEQ ID NO 118582 for detecting SNP TSC0029619.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 XX WO200177384-A2.
 XX 18-OCT-2001.
 PD 06-APR-2001; 2001WO-IB000713.
 XX (EPIG-) EPIGENOMICS AG.
 PA Olek A, Piepenbrock C, Berlin K;
 FI WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 118582; 29pp + Sequence Listing; German.
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX SQ Sequence 13 BP; 9 A; 1 C; 0 G; 3 T; 0 U; 0 Other;
 Query Match 13.7%; Score 10; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 CY 948 TTTAATGTAT 957
 DB 13 TTTAATGTAT 4
 RESULT 827
 ABF69464
 ID ABF69464 standard; DNA; 13 BP.
 XX ABF69464;
 XX 22-FEB-2002 (first entry)
 XX Oligonucleotide SEQ ID NO 169461 for detecting SNP TSC0042329.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 XX WO200177384-A2.
 XX 18-OCT-2001.
 PD 06-APR-2001; 2001WO-IB000713.
 XX (EPIG-) EPIGENOMICS AG.
 PA Olek A, Piepenbrock C, Berlin K;
 FI WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 118582; 29pp + Sequence Listing; German.
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX SQ Sequence 13 BP; 9 A; 1 C; 0 G; 3 T; 0 U; 0 Other;
 Query Match 13.7%; Score 10; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 CY 948 TTTAATGTAT 957
 DB 13 TTTAATGTAT 4

Claim 1; SEQ ID NO 169461; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 2 A; 0 C; 2 G; 8 T; 0 U; 1 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 83.3%; Pred. No. 1e+03;
Matches 10; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

944 TTGGTTTAATGT 955
|||||
2 TTGTTTAAATGY 13

RESULT 828
3F69932
ABF69932 standard; DNA; 13 BP.

ABF69932;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 169929 for detecting SNP TSC0006683.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 169929; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 8 A; 2 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

948 TTTAATGCTAT 957
|||||
13 TTTAATGCTAT 4

ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

948 TTTAATGCTAT 957
|||||
1 TTTAATGCTAT 10

RESULT 829
ABF69933/C
ID ABF69933 standard; DNA; 13 BP.

XX AC ABF69933;

XX 22-FEB-2002 (first entry)

XX DE Oligonucleotide SEQ ID NO 169930 for detecting SNP TSC0006683.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

XX Claim 1; SEQ ID NO 169930; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 8 A; 2 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

948 TTTAATGCTAT 957
|||||
13 TTTAATGCTAT 4

```

RESULT 830
ABF70153/c
ID ABF70153 standard; DNA; 13 BP.
XX
AC ABF70153;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 170150 for detecting SNP TSC0042480.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
FN WO200177384-A2.
XX
FD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 170150; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABP99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 8 A; 2 C; 0 G; 3 T; 0 U; 0 Other;
XX
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 948 TTTAATGTAT 957
Db 12 TTTAATGTAT 3

RESULT 831
ABH22124
ID ABH22124 standard; DNA; 13 BP.
XX
AC ABH22124;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 222101 for detecting SNP TSC0054046.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

```

```

XX Homo sapiens.
OS
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 222101; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABP99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 2 A; 0 C; 2 G; 8 T; 0 U; 1 Other;
XX
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 83.3%; Pred. No. 1e+03;
Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 907 ATTTCCTTGGT 918
Db 2 ATTTCCTTGGT 13

RESULT 832
ABC27055/c
ID ABC27055 standard; DNA; 13 BP.
XX
AC ABC27055;
XX
XX 20-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 27072 for detecting SNP TSC0007377.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX

```



```

Best Local Similarity 83.3%; Pred. No. 1e+03;
Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 923 GCCTTTTATCC 934
Db :|||||||
13 RCCTTTTATCTC 2

RESULT 835
ABC55956
ID ABC55956 standard; DNA; 13 BP.
AC ABC55956;
XX
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 55973 for detecting SNP TSC0015229.
DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 55973; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 4 A; 0 C; 1 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 13.7%; Score 10; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1e+03;
XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 948 TTTAATGTAT 957
Db :|||||||
2 TTTAATGTAT 11

RESULT 836
ABC63811
ID ABC63811 standard; DNA; 13 BP.
XX
XX ABC63811;
XX

```

```

XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 63828 for detecting SNP TSC0016855.
DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 63828; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 3 A; 3 C; 0 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 13.7%; Score 10; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1e+03;
XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 926 TTTTATCCCT 935
Db :|||||||
2 TTTTATCCCT 11

RESULT 837
ABF18584
ID ABF18584 standard; DNA; 13 BP.
XX
XX ABF18584;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 118581 for detecting SNP TSC0029619.
DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX

```

18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
Claim 1; SEQ ID NO 118581; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 3 A; 0 C; 1 G; 9 T; 0 U; 0 Other;
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03; Mismatches 0; Indels 0; Gaps 0;
Matches 10; Conservative 0;
948 TTTAATGTAT 957
1 TTTAATGTAT 10
|||||
RESULT 838
9F32038
ABF32038 standard; DNA; 13 BP.
ABF32038;
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 132035 for detecting SNP TSC0032957.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is

PT designed to detect single-nucleotide polymorphisms and cytosine methylation status.
PT
XX Claim 1; SEQ ID NO 132035; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 2 A; 0 C; 2 G; 8 T; 0 U; 1 Other;
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03; Mismatches 0; Indels 0; Gaps 0;
Matches 10; Conservative 0;
QY 944 TTGGTTTAAT 953
|||||
Db 2 TTGGTTTAAT 11
|||||
RESULT 839
ABF70152
ID ABF70152 standard; DNA; 13 BP.
XX
AC ABF70152;
XX
XX 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 170149 for detecting SNP TSC0042480.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
KW
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
PT
XX Claim 1; SEQ ID NO 170149; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073

CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 U; 0 Other;
 Query Match 13.7%; Score 10; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

CY 948 TTTAATGTAT 957
 |||||
 DB 2 TTTAATGTAT 11

RESULT 840
 ABF74917/C
 ID ABF74917 standard; DNA; 13 BP.
 XX
 AC ABF74917;
 XX
 DT 22-FEB-2002 (first entry)
 XX
 XX Oligonucleotide SEQ ID NO 174914 for detecting SNP TSC0043493.
 XX
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 XX WPI; 2001-657177/75.
 XX
 DR WO200177384-A2.
 XX
 XX 18-OCT-2001.
 XX
 PT 06-APR-2001; 2001WO-IB000713.
 XX
 PF 07-APR-2000; 2000DE-01019173.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 XX WPI; 2001-657177/75.
 XX
 DR Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 174914; 29pp + Sequence Listing; German.
 XX

CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 XX Sequence 13 BP; 8 A; 1 C; 0 G; 4 T; 0 U; 0 Other;
 Query Match 13.7%; Score 10; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

CY 948 TTTAATGTAT 957
 |||||

DB 13 TTTAATGTAT 4
 RESULT 841
 ABH04672/C
 ID ABH04672 standard; DNA; 13 BP.
 XX
 AC ABH04672;
 XX
 DT 22-FEB-2002 (first entry)
 XX
 XX Oligonucleotide SEQ ID NO 204649 for detecting SNP TSC0050210.
 XX
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 XX WPI; 2001-657177/75.
 XX
 DR Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 204649; 29pp + Sequence Listing; German.
 XX

CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 XX Sequence 13 BP; 7 A; 0 C; 2 G; 4 T; 0 U; 0 Other;
 Query Match 13.7%; Score 10; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

CY 905 TCATTTCCTT 914
 |||||
 DB 13 TCATTTCCTT 4

RESULT 842
 ABF82790
 ID ABF82790 standard; DNA; 13 BP.
 XX
 AC ABF82790;
 XX
 DT 22-FEB-2002 (first entry)
 XX
 XX Oligonucleotide SEQ ID NO 182787 for detecting SNP TSC0045166.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB0000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.

Claim 1; SEQ ID NO 182787; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-AB099989, AB00010-ABF99989, ABH0010-ABH99989 and AB10010-AB182073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 2 A; 1 C; 2 G; 7 T; 0 U; 1 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 83.3%; Pred. No. 1e+03;
Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

920 TTTGCTTTTAT 931

|||||
2 TTTGCTTTTAT 13

RESULT 843

ABH54690

ABH54690 standard; DNA; 13 BP.

ABH54690;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 254667 for detecting SNP TSC0062076.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB0000713.

07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.

XX Claim 1; SEQ ID NO 254667; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-AB099989, AB00010-ABF99989, ABH0010-ABH99989 and AB10010-AB182073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 4 A; 0 C; 1 G; 7 T; 0 U; 1 Other;

Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 948 TTTAATGTAT 957

|||||
1 TTTAATGTAT 10

RESULT 844

ABH61066

ID ABH61066 standard; DNA; 13 BP.

AC ABH61066;

XX 22-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 261043 for detecting SNP TSC0063384.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

OS Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB0000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.

XX Claim 1; SEQ ID NO 261043; 29pp + Sequence Listing; German.

CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX

SQ Sequence 13 BP; 4 A; 0 C; 4 G; 5 T; 0 U; 0 Other;
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 943 ATTGGTTTAA 952
D5 4 ATTGGTTTAA 13
|||||

RESULT 845
ABC30231
ID ABC30231 standard; DNA; 13 BP.
XX
AC ABC30231;
XX
DT 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 30248 for detecting SNP TSC0009193.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 30248; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX

SQ Sequence 13 BP; 1 A; 5 C; 0 G; 6 T; 0 U; 1 Other;
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 83.3%; Pred. No. 1e+03;
Matches 10; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 923 GCCTTTTATCCC 934
D5 1 RCCTTTTATCTC 12
|||||

RESULT 846
ABC31894
ID ABC31894 standard; DNA; 13 BP.
XX
AC ABC31894;
XX
DT 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 31911 for detecting SNP TSC0009939.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 31911; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX

SQ Sequence 13 BP; 3 A; 0 C; 4 G; 5 T; 0 U; 1 Other;
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 945 TGGTTTAAATG 954
D5 2 TGGTTTAAATG 11
|||||

RESULT 847
ABC31895/c

```
ABC31895 standard; DNA; 13 BP.
ABC31895;
20-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 31912 for detecting SNP TSC0009939.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 31912; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABR00010-ABR82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 5 A; 4 C; 0 G; 3 T; 0 U; 1 Other;
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABR00010-ABR82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 5 A; 4 C; 0 G; 3 T; 0 U; 1 Other;
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
945 TGGTTTAATG 954
|||||
12 TGGTTTAATG 3
SULT 848
.F94203/C
ABF94203 standard; DNA; 13 BP.
ABF94203;
22-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 194200 for detecting SNP TSC0047758.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 194200; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABR00010-ABR82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 8 A; 1 C; 0 G; 4 T; 0 U; 0 Other;
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
948 TTTAATGAT 957
|||||
12 TTTAATGAT 3
RESULT 849
ABF72022
ID ABF72022 standard; DNA; 13 BP.
XX
AC ABF72022;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 172019 for detecting SNP TSC0042890.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
```

DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
FS Claim 1; SEQ ID NO 172019; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 5 A; 0 C; 1 G; 7 T; 0 U; 0 Other;
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
CY 948 TTTAATGTAT 957
Db 1 TTTAATGTAT 10
RESULT 850
ABF72023/C
ID ABF72023 standard; DNA; 13 BP.
XX
AC ABF72023;
XX
XX 22-FEB-2002 (first entry)
DT
DE Oligonucleotide SEQ ID NO 172020 for detecting SNP TSC0042890.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 172020; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,

CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 7 A; 1 C; 0 G; 5 T; 0 U; 0 Other;
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
CY 948 TTTAATGTAT 957
Db 13 TTTAATGTAT 4
RESULT 851
ABH23312
ID ABH23312 standard; DNA; 13 BP.
XX
XX ABH23312;
XX
XX 22-FEB-2002 (first entry)
DT
DE Oligonucleotide SEQ ID NO 223289 for detecting SNP TSC0005484.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 223289; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 3 A; 0 C; 2 G; 7 T; 0 U; 1 Other;
Query Match 13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 83.3%; Pred. No. 1e+03;
Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;


```

EP 06-APR-2001; 2001WO-IB000713.
XX
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 101974; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 8 A; 1 C; 0 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 13.7%; Score 10; DB 1; Length 13;
XX Best Local Similarity 100.0%; Pred. No. 1e+03;
XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY 948 TTTAATGTAT 957
XX
XX 13 TTTAATGTAT 4
XX
XX
XX
XX RESULT 855
XX ABF02348/C
XX ID ABF02348 standard; DNA; 13 BP.
XX
XX AC ABF02348;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 102345 for detecting SNP TSC0025524.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX Oligonucleotide SEQ ID NO 102345 for detecting SNP TSC0025524.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.

```

```

XX
XX PS Claim 1; SEQ ID NO 102345; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 9 A; 0 C; 2 G; 1 T; 0 U; 1 Other;
XX
XX Query Match 13.7%; Score 10; DB 1; Length 13;
XX Best Local Similarity 83.3%; Pred. No. 1e+03;
XX Matches 10; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
XX
QY 904 GTCATTTTCTTT 915
XX
XX 13 RTTATTTTCTTT 2
XX
XX
XX RESULT 856
XX ABF09012
XX ID ABF09012 standard; DNA; 13 BP.
XX
XX AC ABF09012;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 109009 for detecting SNP TSC0027286.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 109009; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX

```

```
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 3 A; 0 C; 1 G; 9 T; 0 U; 0 Other;

Query Match      13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

948 TTTAATGTA 957
|||||
3 TTTAATGTA 12

RESULT 857
ABF35912 standard; DNA; 13 BP.
ABF35912;
ABF35912;
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 135909 for detecting SNP TSC0033934.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 135909; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 4 A; 0 C; 4 G; 5 T; 0 U; 0 Other;

Query Match      13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

947 GTTAAATGTA 956
|||||
1 GTTAAATGTA 10

was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 3 A; 0 C; 1 G; 9 T; 0 U; 0 Other;

Query Match      13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

948 TTTAATGTA 957
|||||
3 TTTAATGTA 12

RESULT 858
ABH18304/c
ABH18304 standard; DNA; 13 BP.
ABH18304;
ABH18304;
22-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 218281 for detecting SNP TSC0053061.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 218281; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 7 A; 0 C; 4 G; 2 T; 0 U; 0 Other;

Query Match      13.7%; Score 10; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

906 CATTTTCCTT 915
|||||
12 CATTTTCCTT 3

RESULT 859
ABF97924/c
ABF97924 standard; DNA; 13 BP.
ABF97924;
ABF97924;
22-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 197921 for detecting SNP TSC0048708.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
```


KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 OS Homo sapiens.
 XX WO200177384-A2.
 FN 18-OCT-2001.
 PD 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 PR (EPIG-) EPIGENOMICS AG.
 PA Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 197921; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABJ00010-ABJ82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 5 A; 0 C; 4 G; 4 T; 0 U; 0 Other;
 Query Match 13.7%; Score 10; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 924 CCTTTTATCC 933
 DB 13 CCTTTTATCC 4
 RESULT 860
 ABH03511
 ID ABEH03511 standard; DNA; 13 BP.
 AC ABH03511;
 XX 22-FEB-2002 (first entry)
 DT Oligonucleotide SEQ ID NO 203488 for detecting SNP TSC0049964.
 DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 OS WO200177384-A2.
 FN 18-OCT-2001.
 PD 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 PR (EPIG-) EPIGENOMICS AG.
 PA

XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 203488; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABJ00010-ABJ82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 1 A; 3 C; 0 G; 9 T; 0 U; 0 Other;
 Query Match 13.7%; Score 10; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 1e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 905 TCATTTTCTT 914
 DB 4 TCATTTTCTT 13
 RESULT 861
 AAX14798
 ID AAX14798 standard; DNA; 14 BP.
 AC AAX14798;
 XX 24-MAR-1999 (first entry)
 DT Triple helix forming nucleotides 1810-1823 of Hepatitis B virus.
 DE Triple-helix forming region; Triplex formation; DNA detection;
 XX identification; bacteria; oncogene; virus; ds.
 KW Hepatitis B virus.
 OS US5861244-A.
 FN 19-JAN-1999.
 PD 22-DEC-1993; 93US-00173489.
 XX 29-OCT-1992; 92US-00968436.
 PR (PROF-) PROFILE DIAGNOSTIC SCI INC.
 PA Hepburn AG, Wang C;
 PI WPI; 1999-130384/11.
 XX Assay of genetic sequences based on triplex formation from double
 PT stranded analyte - and hybrid of anchor and reporter sequences, with
 PT reporter released if triplex formation occurs, used e.g. to identify
 PT bacteria.
 XX Disclosure; Col 19-20; 168pp; English.
 PS The present sequence represents a potential triple-helix forming region.
 CC It can be used to demonstrate the assay of the invention. The assay

comprises adding a sample containing double-stranded DNA test sequences, e.g. containing the present sequence, to an aqueous medium containing at least one complex of anchor DNA, attached to a solid support, and reporter DNA, where either a part of the anchor DNA or reporter DNA is designed to form a triple-strand structure with part of the test sequence. Triplex formation results in displacement of the reporter DNA which is detected as an indication of the presence of the DNA test sequence. The method is used to detect DNA sequences, particularly for identification of bacteria (by detecting genes for ribosomal RNA) in clinical samples, but also detection of oncogenes and Hepatitis B virus

Sequence 14 BP; 1 A; 6 C; 0 G; 7 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 14;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 935 TCCTCTTCAT 944
DB 2 TCCTCTTCAT 11
|||||

RESULT 862
X14810
AAI14810 standard; DNA; 14 BP.

AAI14810;

24-MAR-1999 (first entry)

Triple helix forming nucleotides 274-287 of Hepatitis B virus.

Triple-helix forming region; Triplex formation; DNA detection; identification; Bacteria; oncogene; virus; ds.

Hepatitis B virus.

US5861244-A.

19-JAN-1999.

22-DEC-1993; 93US-00173489.

29-OCT-1992; 92US-00968436.

(PROF-) PROFILE DIAGNOSTIC SCI INC.

Hepburn AG, Wang C;

WPI; 1999-130384/11.

Assay of genetic sequences based on triplex formation from double stranded analyte - and hybrid of anchor and reporter sequences, with reporter released if triplex formation occurs, used e.g. to identify bacteria.

Disclosure; Col 19-20; 168pp; English.

The present sequence represents a potential triple-helix forming region. It can be used to demonstrate the assay of the invention. The assay comprises adding a sample containing double-stranded DNA test sequences, e.g. containing the present sequence, to an aqueous medium containing at least one complex of anchor DNA, attached to a solid support, and reporter DNA, where either a part of the anchor DNA or reporter DNA is designed to form a triple-strand structure with part of the test sequence. Triplex formation results in displacement of the reporter DNA which is detected as an indication of the presence of the DNA test sequence. The method is used to detect DNA sequences, particularly for identification of bacteria (by detecting genes for ribosomal RNA) in clinical samples, but also detection of oncogenes and Hepatitis B virus

Sequence 14 BP; 1 A; 6 C; 0 G; 7 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 14;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 935 TCCTCTTCAT 944
DB 2 TCCTCTTCAT 11
|||||

RESULT 863
AAH76180/c
ID AAH76180 standard; DNA; 14 BP.

AAH76180;

29-OCT-2001 (first entry)

Region of ALC locus after Ds insertion.

SGT10166; dehiscence; indehiscent; pod shattering; agronomic; transgenic; ALC locus; ss.

Arabidopsis thaliana.

WO200159122-A1.

16-AUG-2001.

01-FEB-2001; 2001WO-SG000017.

11-FEB-2000; 2000WO-SG000022.

(MOLE-) INST MOLECULAR AGROBIOLOGY.

Sundaresan V, Rajani S;

WPI; 2001-514672/56.

New gene from Arabidopsis thaliana involved in dehiscence and mutations in the gene which prevents dehiscence of mature fruit in plants, useful for producing indehiscent transgenic plants.

Example 4; Fig 5; 74pp; English.

The invention relates to the STG10166 polypeptide from A. thaliana.

Mutations in SGT10166 gene prevent dehiscence of mature fruit. A recombinant SGT10166 DNA molecule is capable of altering dehiscence of a mature fruit in plants which produce seed pods, by antisense or sense suppression mechanism and is useful for producing indehiscent transgenic plants. SGT10166 gene is useful for screening genomic DNA of plants having seed pods to identify homologous genes, which provide additional nucleic acids for use in inhibiting dehiscence which leads to significant seed loss during harvesting of crops. This is of agronomic importance in crops such as oil seed rape (Brassica napus). Prokaryotic or eukaryotic cells transformed with the polynucleotides are useful for producing SGT10166 polypeptides and in studying the characteristics of SGT10166 polypeptides. Plants having modified dehiscence phenotypes can be used as model systems for further study of the formation and differentiation of fruit tissue in plants. The probes and primers based on the SGT10166 gene sequence are useful for identifying genes and proteins homologous to SGT10166 in other species. These gene sequences and proteins are useful in diagnostic/prognostic methods, such as predicting reproductive phenotype in transgenic plants and genetic engineering methods for the species from which they have been isolated. Agronomic and selectable marker genes can be operably linked to SGT10166 regulatory sequences and expressed in transformed plants to express various phenotypes of agronomic interest. The present sequence represents a region of ALC locus after Ds insertion

Sequence 14 BP; 5 A; 2 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 14;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 933 CCTCCTCTTC 942
|||||

Db 10 CCTCCTCTTC 1

RESULT 864
ADE14325/c
ADE14325 standard; DNA; 14 BP.

AC XX
AT XX
CT 29-JAN-2004 (first entry)
DE Optineurin promoter motif, repeat element or regulatory region #434.
KW Human; optineurin; ds; ophthalmological; single nucleotide polymorphism;
KW SNP; glaucoma; progressive ocular hypertensive disorder;
KW glaucoma related disorder; motif; repeat element; regulatory region.
XX Homo sapiens.
OS US2003190617-A1.
FN XX
PD 09-OCT-2003.
XX
PP 06-MAR-2002; 2002US-00091281.
XX
FR 06-MAR-2002; 2002US-00091281.
XX
FA (STEE/) SI E.
FA (RAYM/) RAYMOND V.
FA (MORI/) MORISSETTE J.
XX
PI Raymond V, Morissette J, Si E;
XX WPI; 2003-864168/80.
XX
PT New nucleic acid sequences of the optineurin gene are useful to detect
PT polymorphisms particularly single nucleotide polymorphisms in the
PT optineurin promoter to diagnose, prognosis and treat glaucoma and related
PT disorders.
XX
PS Claim 11; SEQ ID NO 436; 159pp; English.
XX
CC The invention relates to an isolated nucleic acid (N1) comprising at
CC least 20 but not more than 1500 consecutive nucleotides of the optineurin
CC promoter appearing as ADE13890. Also included are the optineurin promoter
CC operably linked to a heterologous nucleic acid, a nucleic acid capable of
CC detecting a single nucleotide polymorphism (SNP) in the optineurin
CC promoter, a host cell comprising the promoter operably linked to a
CC heterologous sequence, diagnosing or prognosing glaucoma in a sample
CC obtained from a cell or bodily fluid (comprising detecting a polymorphism
CC in a promoter region of the optineurin gene, associated with a glaucoma
CC phenotype), detecting a SNP sequence variation in a sample containing
CC DNA, detecting the presence of an optineurin promoter sequence variation
CC in a sample containing DNA, determining the presence or increased
CC susceptibility to glaucoma or to a progressive ocular hypertensive
CC disorder resulting in loss of visual field in a patient (or the severity
CC or progression of glaucoma in a patient, comprising providing
CC amplification reaction primers that direct amplification of a selected
CC nucleic acid region containing the variation within the optineurin
CC promoter and amplifying the DNA) and detecting a polymorphism (comprising
CC obtaining a sample containing human genomic DNA, providing a nucleic acid
CC capable of detecting a SNP located within an optineurin promoter, and
CC detecting the polymorphism). The invention is used to diagnose and
CC prognose glaucoma and also to treat glaucoma related disorders. The
CC present sequence is an optineurin promoter motif, repeat element or
CC putative regulatory region.
XX
SQ Sequence 14 BP; 5 A; 0 C; 9 G; 0 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 14;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 932 CCTCCTCTTT 941
|||||

Db 13 CCTCCTCTTT 4

RESULT 865
AAX66764
ID AAX66764 standard; RNA; 15 BP.
XX
AC AAX66764;
XX
DT 20-JUL-1999 (first entry)
XX
DE Mouse CD40 hammerhead ribozyme target SEQ ID NO:3396.
XX
KW Arthritic condition; graft tolerance; immune response; target; cleavage;
KW hammerhead ribozyme; hairpin ribozyme; human; rabbit; mouse; collagenase;
KW stromelysin; synovial membrane; joint; arthritis; osteoarthritis;
KW rheumatoid arthritis; autoimmune disease; allergy; inflammation;
KW diagnosis; ss.
XX
OS Mus sp.
XX
FN WO9618736-A2.
XX
PD 20-JUN-1996.
XX
PF 22-NOV-1995; 95WO-US015516.
XX
PR 13-DEC-1994; 94US-00354920.
PR 23-DEC-1994; 94US-00363253.
PR 23-DEC-1994; 94US-00363254.
PR 17-FEB-1995; 95US-00390850.
PR 20-APR-1995; 95US-00426124.
PR 02-MAY-1995; 95US-00432874.
PR 04-MAY-1995; 95US-00434509.
PR 07-JUL-1995; 95US-0000951P.
PR 07-JUL-1995; 95US-0000974P.
PR 07-AUG-1995; 95US-00512861.
PR 05-OCT-1995; 95US-005411365.
XX
FA (RIBO-) RIBOZYME PHARM INC.
XX
PI Beigelman L, Stinchcomb DT, Jarvis T, Draper X, Pavco P;
PI Mcawiggen J, Gustofson J, Usman N, Wincott P, Matulic-Adamic J;
PI Karpelsky A, Thompson JD, Modak A, Burgin A;
XX
DR WPI; 1996-300653/30.
XX
PT Enzymatic nucleic acid molecules having a hammer-head motif - used for
PT the treatment of arthritis, induction of graft tolerance or treatment of
PT auto-immune diseases.
XX
PS Claim 10; Page 209; 307pp; English.
XX
CC The present invention describes a novel enzymatic nucleic acid (ENA)
CC having a hammerhead motif (HM) comprising: (i) at least 5 ribose residues
CC ; (ii) a 2'-C-allyl modification at position 4 of the ENA; (iii) at least
CC ten 2'-O-methyl modifications; and (iv) a 3'-end modification. The ENA's
CC can inhibit collagenase and stromelysin production in the synovial
CC membrane of joints for the treatment or prevention of arthritis,
CC particularly osteoarthritis or rheumatoid arthritis. The ENA's can also
CC be used to treat antigen presenting cells of a donor to induce tolerance
CC in a recipient to an alloantigen of a donor. They can also be used for
CC enhancing graft tolerance or for treating autoimmune disease, and for
CC treating allergies and other inflammatory conditions. The ENA's can also
CC be used in diagnosis. Ribozyme therapy impacts on the expression of
CC stromelysin without introducing the non-specific effects upon gene
CC expression which accompany treatment with retinoids and dexamethasone.

PA (EPOC-) EPOCH BIOSCIENCE INC.
 XX Dempcy RO. Gall AA, Lohkov SG, Afonina IA, Singer MJ;
 PI Kutyavin IV, Vermeulen NMJ;
 XX WPI; 2001-648247/74.
 DR
 XX
 XX New modified oligonucleotides containing pyrazolo-pyrimidine and/or 5-
 PT substituted pyrimidine bases, useful as probes or primers in assays,
 PT especially for mismatch discrimination.
 XX
 XX Example 13; Page 87; 116pp; English.
 PS
 XX The present sequence is that of an oligonucleotide probe in which 6-amino
 CC -3-prop-1-ynyl-5-hydroxyrazolo(3,4-d)pyrimidine-4-one (PPG) replaces G.
 CC This is one of a set of PPG-modified probes (see AAI70465-502) used to
 CC illustrate the use of an algorithm, described in the specification, to
 CC predict the Tm of modified oligonucleotides containing PPG both with and
 CC without a modified groove binder (MGB). In the present case, the accuracy
 CC of the prediction algorithm was 0.26 and 1.85 degree C for the PPG-
 CC containing oligonucleotide and the corresponding PPG-containing MGB-
 CC modified oligonucleotide, respectively. The algorithm allows a collection
 CC of probe or primer sequences with a desired Tm value to be identified.
 CC The invention provides modified oligonucleotides for mismatch
 CC discrimination. It also provides methods for distinguishing related
 CC polynucleotides, detecting target sequences, sequencing, primer
 CC extension, for examining gene expression, and for identifying a mutation
 CC or polymorphism
 XX
 SQ Sequence 15 BP; 3 A; 1 C; 0 G; 6 T; 0 U; 5 Other;
 Query Match 13.7%; Score 10; DB 1; Length 15;
 Best Local Similarity 71.4%; Pred. No. 1.1e+03;
 Matches 10; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 940 TTCATGTGTTTAAAT 953
 Db ||||| |||||
 2 TTCATNNNTTAAAT 15
 RESULT 868
 AAS57217/C
 ID AAS57217 standard; DNA; 15 BP.
 XX
 AC AAS57217;
 XX
 DT 16-JAN-2002 (first entry)
 XX
 XX Human CHRN2 allele specific oligonucleotide (ASO) probe #14.
 DE
 KW Human; cholinergic receptor, nicotinic, beta polypeptide 2; neuronal;
 KW CHRN2; memory disorder; Alzheimer's disease; epilepsy; learning;
 KW chromosome 1q21; schizophrenia; attention deficit/hyperactivity disorder;
 KW ADHD; autosomal dominant nocturnal frontal lobe epilepsy; ADNFLE; ss;
 KW allele specific oligonucleotide; ASO; probe.
 XX
 OS Homo sapiens.
 XX
 XX WO200174833-A2.
 EN
 XX 11-OCT-2001.
 FD
 XX
 XX 03-APR-2001; 2001WO-US010666.
 XX
 XX
 FR 03-APR-2000; 2000US-0194155P.
 FR 13-JUL-2000; 2000US-0217952P.
 XX
 XX (GENA-) GENAISSANCE PHARM INC.
 FA
 XX Choi JY, Klieem SE, Koshy B, Lee HH, Sanchis A;
 PI WPI; 2001-626374/72.
 DR
 XX

PT Genotyping cholinergic receptor, nicotinic, beta-polypeptide 2 gene of an
 PT individual involves determining for two copies of the gene, the identity
 PT of nucleotide pair at polymorphic sites selected from P51-24.
 XX
 PS Claim 15; Page 14; 82pp; English.
 XX
 XX The invention relates to genotyping/haplotyping the cholinergic receptor,
 CC nicotinic, beta-polypeptide 2 (neuronal) (CHRN2) gene of an individual,
 CC comprising determining for the two copies of the CHRN2 gene present in
 CC the individual, the identity of the nucleotide pair at one or more
 CC polymorphic sites selected from P51-24. Also include are oligonucleotides
 CC for performing the method and the nucleotide sequence of the polymorphic
 CC variants of CHRN2. The method is useful for detecting novel CHRN2
 CC polymorphisms and for determining if an individual has a haplotype or
 CC haplotype pairs defined in the specification and to validate CHRN2 as a
 CC candidate agent for treating a specific condition or disease predicted to
 CC be associated with CHRN2 activity (e.g. a memory disorder, Alzheimer's
 CC disease, epilepsy, a learning disorder, schizophrenia, attention
 CC deficit/hyperactivity disorder, (ADHD) and autosomal dominant nocturnal
 CC frontal lobe epilepsy (ADNFLE)), and in the design of clinical trials of
 CC candidate drugs for treating a specific condition or disease predicted to
 CC be associated with CHRN2 activity. The method is useful to screen for
 CC compounds targeting CHRN2 to treat a specific conditions or disease
 CC associated with CHRN2 activity. The polymorphic nucleic acids are useful
 CC in studying the expression and function of CHRN2, and in expressing
 CC CHRN2 protein for use in screening for candidate drugs to treat diseases
 CC related to CHRN2 activity and are useful for therapeutic purposes. The
 CC CHRN2 gene is located on chromosome 1q21. The present sequence is an
 CC allele specific oligonucleotide (ASO) probe for performing the method of
 CC the invention
 XX
 SQ Sequence 15 BP; 3 A; 0 C; 10 G; 1 T; 0 U; 1 Other;
 Query Match 13.7%; Score 10; DB 1; Length 15;
 Best Local Similarity 83.3%; Pred. No. 1.1e+03;
 Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
 QY 931 TCCCTCCTCTTC 942
 Db |||||:|
 15 TCCCTCCYCTCC 4
 RESULT 869
 AAF48236
 ID AAF48236 standard; DNA; 15 BP.
 XX
 AC AAF48236;
 XX
 XX 30-MAR-2001 (first entry)
 DT
 XX IGFBP3 oligonucleotide #1656.
 DE
 XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
 KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
 KW skin disorder; insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
 KW growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
 KW hyperneovascular condition; hyperplasia; kidney disease;
 KW neovascular condition of the retina; ss.
 XX
 OS Homo sapiens.
 XX
 XX WO200078341-A1.
 PN
 XX 28-DEC-2000.
 PD
 XX 21-JUN-2000; 2000WO-AU000693.
 PF
 XX 21-JUN-1999; 99US-0140345P.
 FR
 XX (MURD-) MURDOCH CHILDRENS RES INST.
 PA

Wright CJ, Werther GA, Edmondson SR;
WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisenescence nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 7; Page 54; 20lpp; English.

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisenescence oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisenescence oligonucleotides of the present invention (see AAF45151 and AAF45153-45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia

Sequence 15 BP; 0 A; 7 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

932 CCTCTCTCTT 941
|||||||
6 CCTCTCTCTT 15

RESULT 870

AAF48243
AAF48243 standard; DNA; 15 BP.

AAF48243;

30-MAR-2001 (first entry)

IGFBP3 oligonucleotide #1663.

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.

Homo sapiens.

WO200078341-A1.

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693.

21-JUN-1999; 99US-0140345P.

(MURD-) MURDOCH CHILDRENS RES INST.

Wright CJ, Werther GA, Edmondson SR;

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisenescence nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 7; Page 55; 20lpp; English.

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisenescence oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisenescence oligonucleotides of the present invention (see AAF45151 and AAF45153-45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia

Sequence 15 BP; 3 A; 5 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

934 CTCCTCTTCA 943

|||||||

1 CTCCTCTTCA 10

RESULT 871

AAF48461/C

AAF48461 standard; DNA; 15 BP.

AAF48461;

30-MAR-2001 (first entry)

IGFBP3 oligonucleotide #1881.

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.

Homo sapiens.

WO200078341-A1.

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693.

21-JUN-1999; 99US-0140345P.

(MURD-) MURDOCH CHILDRENS RES INST.

Wright CJ, Werther GA, Edmondson SR;

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisenescence nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

```

XX
PS
XX
XX
CC The present invention relates to a method for ameliorating the effects of
CC skin disorders. The method comprises contacting the skin with an
CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC inhibiting or reducing growth factor mediated cell proliferation,
CC inflammation and/or other disorders. The present sequence is an
CC oligonucleotide which can be used to design the antisense
CC oligonucleotides of the present invention (see AAP45151 and AAP45153-
CC F45161). The method is useful for ameliorating the effects of psoriasis,
CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC hyperneovascular condition such as a neovascular condition of the retina,
CC brain or skin, growth factor-mediated malignancies, other sclerotic
CC disease, kidney disease, hyperproliferation of the inside of blood
CC vessels or any other hyperplasia
XX
SQ Sequence 15 BP; 6 A; 2 C; 3 G; 4 T; 0 U; 0 Other;
Query Match 13.7%; Score 10; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 919 CTTTGCCCTTT 928
DQ 11 CTTTGCCCTTT 2
RESULT 872
AAF49427
ID AAF49427 standard; DNA; 15 BP.
XX
AC AAF49427;
XX
XX 30-MAR-2001 (first entry)
XX
XX IGF-I oligonucleotide #387.
XX
XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
XX cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
XX skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
XX IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
XX growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
XX keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
XX hyperneovascular condition; hyperplasia; kidney disease;
XX neovascular condition of the retina; ss.
XX Homo sapiens.
XX OS
XX PN WO200078341-A1.
XX
XX 28-DEC-2000.
XX
XX 21-JUN-2000; 2000WO-AU000693.
XX
XX 21-JUN-1999; 99US-0140345P.
XX
XX (MURD-) MURDOCH CHILDRENS RES INST.
XX
XX Wright CJ, Werther GA, Edmondson SR;
XX WPI; 2001-041421/05.
XX
XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering
XX UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
XX inhibits or reduces growth factor mediated cell proliferation and/or
XX inflammation.
XX
XX Example 8; Page 63; 201pp; English.
XX
XX The present invention relates to a method for ameliorating the effects of

```

```

CC skin disorders. The method comprises contacting the skin with an
CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC inhibiting or reducing growth factor mediated cell proliferation,
CC inflammation and/or other disorders. The present sequence is an
CC oligonucleotide which can be used to design the antisense
CC oligonucleotides of the present invention (see AAP45151 and AAP45153-
CC F45161). The method is useful for ameliorating the effects of psoriasis,
CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC hyperneovascular condition such as a neovascular condition of the retina,
CC brain or skin, growth factor-mediated malignancies, other sclerotic
CC disease, kidney disease, hyperproliferation of the inside of blood
CC vessels or any other hyperplasia
XX
SQ Sequence 15 BP; 2 A; 6 C; 3 G; 4 T; 0 U; 0 Other;
Query Match 13.7%; Score 10; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 899 CCTGTGTCAT 908
DQ 6 CCTGTGTCAT 15
RESULT 873
AAF49428
ID AAF49428 standard; DNA; 15 BP.
XX
AC AAF49428;
XX
XX 30-MAR-2001 (first entry)
XX
XX IGF-I oligonucleotide #388.
XX
XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
XX cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
XX skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
XX IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
XX growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
XX keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
XX hyperneovascular condition; hyperplasia; kidney disease;
XX neovascular condition of the retina; ss.
XX Homo sapiens.
XX OS
XX PN WO200078341-A1.
XX
XX 28-DEC-2000.
XX
XX 21-JUN-2000; 2000WO-AU000693.
XX
XX 21-JUN-1999; 99US-0140345P.
XX
XX (MURD-) MURDOCH CHILDRENS RES INST.
XX
XX Wright CJ, Werther GA, Edmondson SR;
XX WPI; 2001-041421/05.
XX
XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering
XX UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
XX inhibits or reduces growth factor mediated cell proliferation and/or
XX inflammation.
XX
XX Example 8; Page 63; 201pp; English.
XX
XX The present invention relates to a method for ameliorating the effects of
CC skin disorders. The method comprises contacting the skin with an
CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC inhibiting or reducing growth factor mediated cell proliferation,

```

inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia

Sequence 15 BP; 2 A; 6 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

899 CCTGTCAT 908
|||||||
5 CCTGTCAT 14

RESULT 874
FAF462/C

AAF48462 standard; DNA; 15 BP.

AAF48462;

30-MAR-2001 (first entry)

IGFBP3 oligonucleotide #1882.

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; insulin-like Growth Factor 1 receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.

Homo sapiens.

WO200078341-A1.

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693.

21-JUN-1999; 99US-0140345P.

(MURD-) MURDOCH CHILDRENS RES INST.

Wright CJ, Werther GA, Edmondson SR;

WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation.

Example 7; Page 56; 201pp; English.

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis,

CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis, CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a CC hyperneovascular condition such as a neovascular condition of the retina, CC brain or skin, growth factor-mediated malignancies, other sclerotic CC disease, kidney disease, hyperproliferation of the inside of blood CC vessels or any other hyperplasia

SQ Sequence 15 BP; 7 A; 2 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 919 CTTTGCCCTT 928
|||||||
Db 10 CTTTGCCCTT 1

RESULT 875

ABK68681

ID ABK68681 standard; DNA; 15 BP.

XX AC ABK68681;

XX DT 02-JUL-2002 (first entry)

XX DE Human SCYA2 gene allele-specific oligonucleotide sequencing primer #1.

KW Human; small inducible cytokine A2; SCYA2; primer; ss; haplotype pair;

KW haplotyping; atherosclerosis; antiarteriosclerotic; gene therapy;

KW single nucleotide polymorphism; genotyping; drug screening; sequencing; chromosome 17q11.2-q21.1.

XX OS Homo sapiens.

XX PN WO200218413-A2.

XX PD 07-MAR-2002.

XX PF 28-AUG-2001; 2001WO-US026899.

XX PR 28-AUG-2000; 2000US-0228496P.

XX PA (GENA-) GENAISSANCE PHARM INC.

XX PI Anastasio AE, Finkel K, Koshy B, Kumar AM, Lee HH;

XX PS WPI; 2002-339655/37.

XX PT New genetic variants having polymorphisms in the small inducible cytokine A1 (SCYA2) gene, useful for studying the function of SCYA2, and for treating disorders affected by expression or function of the SCYA2 isogene.

XX PT Claim 17; Page 13; 59pp; English.

XX PS The invention relates to single nucleotide polymorphisms in the gene encoding human small inducible cytokine A2 (SCYA2) polypeptide. A method for haplotyping the SCYA2 gene in an individual comprises identifying the nucleotide at one or more polymorphic sites and determining whether one of the copies of the gene is defined by one of the SCYA2 haplotypes given in the specification or whether both copies are defined by a haplotype pair. This method is useful in genotyping, whereby all possible haplotype pairs can be assigned to specific genotypes. An association between a trait and a haplotype or haplotype pair of the SCYA2 gene can be identified by comparing the frequency of the haplotype or haplotype pair in a population exhibiting the trait with the frequency of the haplotype or haplotype pair in a reference population, where a higher haplotype frequency in the trait population indicates the trait is associated with the haplotype or haplotype pair. SCYA2 and its corresponding DNA are used for studying the expression and function of SCYA2, and in screening for candidate drugs to treat diseases related to SCYA2 activity, such as atherosclerosis. Sequences ABK68681-ABK68692 represent allele-specific

CC oligonucleotide sequencing primers used for detecting SCVA2 gene
 CC polymorphisms
 XX Sequence 15 BP; 2 A; 7 C; 2 G; 3 T; 0 U; 1 Other;
 SQ Query Match 13.7%; Score 10; DB 1; Length 15;
 Best Local Similarity 100.0%; Pred. No. 1.1e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

CY 930 ATCCCTCTC 939
 Tt |||||
 3 ATCCCTCTC 12

RESULT 876
 ABN87905/c
 ID ABN87905 standard; DNA; 15 BP.
 XX AC
 XX ABN87905;
 DT 12-AUG-2002 (first entry)
 XX Human GSR allele specific oligonucleotide probe SEQ ID NO:24.
 DE Human; glutathione reductase; GSR; enzyme; haemolytic anaemia; SNP;
 KW gene therapy; antianaemic; polymorphic; single nucleotide polymorphism;
 KW probe; ss.
 XX Homo sapiens.
 OS
 PH Key Location/Qualifiers
 FT misc_feature 8
 TT /*tag= a
 TT /note= "polymorphic base"
 XX
 FN WO200242320-A2.
 XX 30-MAY-2002.
 PD
 XX 13-NOV-2001; 2001WO-US046473.
 PF
 XX 10-NOV-2000; 2000US-0247202P.
 PR
 XX (GENA-) GENAISSANCE PHARM INC.
 PA
 PI Bieglecki KM, Sanchis A, Sausker EA, Sun X;
 PL WPI; 2002-471719/50.
 DR
 XX Novel genetic variants of Glutathione reductase isoenzymes, useful for
 PT improving efficiency and reliability in drug development for treating
 PT hemolytic anemia.
 PS
 XX Claim 14; Page 14; 137pp; English.

CC The present invention describes genetic variants of the human glutathione
 CC reductase (GSR) gene (1). (1) has antianaemic activity and can be used in
 CC gene therapy. (1) can be used in screening for drugs targeting (1) that
 CC are useful for treating haemolytic anaemia. Methods from the present
 CC invention can be used for improving the efficiency and reliability of
 CC several steps in the discovery and development of drugs for treating
 CC diseases associated with GSR activity; for haplotyping, which is also
 CC used by the pharmaceutical research scientist to validate GSR as a
 CC candidate target for treating a specific condition or disease predicted
 CC to be associated with GSR activity, e.g. haemolytic anaemia, and in the
 CC design of clinical trials for treating a specific condition of disease
 CC associated with GSR activity; and for screening compounds targeting GSR.
 CC (1) is useful in studying the expression and function of GSR, and in
 CC expressing GSR protein for use in screening for candidate drugs to treat
 CC diseases related to GSR activity. (1) is also useful in studying the
 CC effect of the variation on the biological activity of GSR as well as on
 CC the binding affinity of candidate drugs targeting GSR for the treatment
 CC of haemolytic anaemia. The present sequence represents an allele specific

CC oligonucleotide (ASO) probe for the human GSR gene, which is given in the
 CC exemplification of the present invention. N.B. The polymorphic base
 CC (showing a single nucleotide polymorphism) in the ASO probe is shown
 CC using an IUPAC ambiguity code (as given in the present invention)
 XX Sequence 15 BP; 7 A; 4 C; 1 G; 2 T; 0 U; 1 Other;
 SQ Query Match 13.7%; Score 10; DB 1; Length 15;
 Best Local Similarity 83.3%; Pred. No. 1.1e+03;
 Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 941 TCATTGGTTAA 952
 Db |||||
 12 TCATYGGTTGA 1

RESULT 877
 ABK81303/c
 ID ABK81303 standard; DNA; 15 BP.
 XX AC
 XX ABK81303;
 DT 13-AUG-2002 (first entry)
 XX Human ADMR gene allele-specific oligonucleotide sequencing primer #22.
 DE Human; G protein-coupled receptor similar to the adrenomedullin receptor;
 KW ADMR; haplotyping; haplotype pair; congestive heart failure; primer; ss;
 KW arterial hypertension; pulmonary hypertension; renal failure; sepsis;
 KW chromosome 12; single nucleotide polymorphism; sequencing.
 XX Homo sapiens.
 OS
 XX WO200226770-A2.
 FN
 XX 04-APR-2002.
 PD
 XX 01-OCT-2001; 2001WO-US030879.
 PF
 XX 29-SEP-2000; 2000US-0236570P.
 PR
 XX (GENA-) GENAISSANCE PHARM INC.
 PA
 PI Choi JY, Lee HH, Shah N;
 PL WPI; 2002-435192/46.
 DR
 XX Novel G-protein coupled receptor similar to the adrenomedullin receptor
 PT gene, useful therapeutically and in screening for drugs targeting
 PT receptor polypeptide.
 XX
 PS Claim 14; Page 14; 78pp; English.

CC The invention relates to single nucleotide polymorphisms in the gene
 CC encoding the human G protein-coupled receptor similar to the
 CC adrenomedullin receptor (ADMR) polypeptide. A method for haplotyping the
 CC ADMR gene in an individual comprises identifying the nucleotide at one or
 CC more polymorphic sites and determining whether one of the copies of the
 CC gene is defined by one of the ADMR haplotypes given in the specification
 CC or whether both copies are defined by a haplotype pair. This method is
 CC useful in genotyping, whereby all possible haplotype pairs can be
 CC assigned to specific genotypes. An association between a trait and a
 CC haplotype or haplotype pair of the ADMR gene can be identified by
 CC comparing the frequency of the haplotype or haplotype pair in a
 CC population exhibiting the trait with the frequency of the haplotype or
 CC haplotype pair in a reference population, where a higher haplotype or
 CC frequency in the trait population indicates the trait is associated with
 CC the haplotype or haplotype pair. ADMR and its corresponding DNA are used
 CC for studying the expression and function of ADMR, for use in screening
 CC for candidate drugs to treat diseases related to ADMR activity, such as
 CC congestive heart failure, arterial hypertension, pulmonary hypertension,
 CC renal failure, and sepsis. Sequences ABK81282-ABK81303 represent allele-
 CC specific oligonucleotide sequencing primers used to detect ADMR gene

polymorphisms

Sequence 15 BP; 4 A; 2 C; 7 G; 1 T; 0 U; 1 Other;

Query Match 13.7%; Score 10; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

933 CCTCCTCTTC 942
|||||
10 CCTCCTCTTC 1

RESULT 878

AS16187/C
AAS16187 standard; DNA; 15 BP.

AAS16187;

14-FEB-2002 (first entry)

Human apolipoprotein C1 (APOC1) gene oligonucleotide probe #5.

Human; apolipoprotein C1; APOC1; single nucleotide polymorphism; probe;
haplotyping; haplotype pair; hypercholesterolaemia; neuroprotective; antilipaeamic.
senile dementia of Alzheimer's type; neuroprotective; antilipaeamic.

Homo sapiens.

WO200177129-A2.

18-OCT-2001.

10-APR-2001; 2001WO-US011808.

11-APR-2000; 2000US-0196545P.

(GENA-) GENAISSANCE PHARM INC.

Bentivegna SC, Chew A, Choi JY, Koshy B, Stephens JC;

WPI; 2002-041286/05.

New haplotypes of the human apolipoprotein C1 gene, useful to detect and find treatment for disease associated with its activity such as hypercholesterolemia and Alzheimer's disease.

Claim 16; Page 13; 51pp; English.

The invention relates to single nucleotide polymorphisms in the human apolipoprotein C1 (APOC1) gene. Haplotyping the APOC1 gene of an individual, comprises determining if the individual has one of the APOC1 haplotypes or haplotype pairs fully defined in the specification. Genotyping the APOC1 gene of an individual, comprises determining the identity of the nucleotide pair at one or more polymorphic sites and predicting a haplotype pair for the APOC1 gene of an individual by enumerating all possible haplotype pairs which are consistent with the genotype, comparing the possible haplotype pairs to the data detailed in the specification and assigning a haplotype pair to the individual that is consistent with the data. Identifying an association between a trait and a haplotype or haplotype pair of the APOC1 gene, comprises comparing the frequency of the haplotype/haplotype pair in a population exhibiting the trait with that of a reference population, where the haplotype/haplotype pair is one described in the specification and a higher frequency in the trait population indicates the trait is associated with the haplotype. The sequences and methods of the invention are used to diagnose and develop treatment for disease associated with APOC1 activity, such as hypercholesterolaemia and senile dementia of Alzheimer's type (SDAT). This sequence represents an oligonucleotide probe used for detecting human APOC1 DNA polymorphisms

Sequence 15 BP; 7 A; 5 C; 0 G; 2 T; 0 U; 1 Other;

Query Match 13.7%; Score 10; DB 1; Length 15;
Best Local Similarity 83.3%; Pred. No. 1.1e+03;
Matches 10; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 907 ATTTCCTTTGGT 918
|||||
Db 13 ATTTCCTTTGGT 2

RESULT 879

ABV93654/C
ID ABV93654 standard; DNA; 15 BP.

XX AC ABV93654;

XX DT 08-JAN-2003 (first entry)

XX DE Bacillus thuringiensis toxin Cry related oligonucleotide Cry1Ga.

XX KW Bacillus thuringiensis; insecticide; toxin; Cry; pepsin cleavage site;
XX KW Pepsin; PCS; ss.

XX OS Bacillus thuringiensis.

XX OS Synthetic.

XX PN FR2822157-A1.

XX PD 20-SEP-2002.

XX PF 19-MAR-2001; 2001FR-00003691.

XX PR 19-MAR-2001; 2001FR-00003691.

XX PA (AVET) AVENTIS CROPS SCIENCE SA.

XX PI Freyssinet G, Rang C, Frutos R;

XX DR WPI; 2003-002439/01.

PT New modified Cry protein, useful as insecticide, comprises at least one additional pepsin cleavage site to reduce persistence in mammalian gut.

XX Example 4; Page 37; 134pp; French.

The present invention describes a modified Cry protein (I) that is sensitive to pepsin and comprises at least one additional pepsin cleavage site (PCS). Also described: (a) increasing pepsin sensitivity of Cry proteins by incorporating at least one extra PCS; (b) polynucleotides (II) that encode (i); (c) chimeric genes (CG) that contain a promoter, (II) and terminator; (d) expression or transformation vector (III) that contains CG; (e) host organism (IV) transformed with (III), also, where the organism is a plant, its parts and seeds; (f) production of (I) by growing (IV); and (g) mono- or polyclonal antibodies (Ab) directed against (I). (I) has insecticide activity. (I) can be used as insecticides, particularly where expressed in transgenic plants. (I) are sensitive to enzymes in the digestive tract of mammals, so do not persist in the tract (lack of persistence is required by regulatory authorities for use, in foods, of seeds containing Cry proteins). Extra PCS do not increase degradation in the digestive tract of insects, so have no effect on insecticidal activity. ABV93450 to ABV93909 and ABP67997 to ABP68308 represent sequences used in the exemplification of the present invention

Sequence 15 BP; 5 A; 0 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 13.7%; Score 10; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 1.1e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 928 TTATCCCTCC 937
|||||
Db 13 TTATCCCTCC 4


```

oncogene; virus; ss.
Synthetic.
Homo sapiens.
US5861244-A.
19-JAN-1999.
22-DEC-1993; 93US-00173489.
29-OCT-1992; 92US-00968436.
(PROF-) PROFILE DIAGNOSTIC SCI INC.
Hepburn AG, Wang C;
WPI; 1999-130384/11.
Assay of genetic sequences based on triplex formation from double
stranded analyte - and hybrid of anchor and reporter sequences, with
reporter released if triplex formation occurs, used e.g. to identify
bacteria.
Disclosure; Col 15-16; 168pp; English.
The present sequence represents a polynucleotide that is able to form a
triple helix with a double stranded sequence. Cytosine bases in the
present can be replaced with 5-methylcytosine for increased triplex
stability. The present sequence is used in the assay of the invention,
where it can be part of the anchor DNA or reporter DNA sequence. The
assay comprises adding a sample containing double-stranded DNA test
sequences to an aqueous medium containing at least one complex of anchor
DNA, attached to a solid support, and reporter DNA, where either a part
of the anchor DNA or reporter DNA is designed to form a triple-strand
structure with part of the test sequence. Triplex formation results in
displacement of the reporter DNA which is detected as an indication of
the presence of the DNA test sequence. The method is used to detect DNA
sequences, particularly for identification of bacteria (by detecting
genes for ribosomal RNA) in clinical samples, but also detection of
oncogenes and Hepatitis B virus
Sequence 13 BP; 0 A; 8 C; 0 G; 5 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
/ 924 CCTTTATCCCTC 936
| | | | |
| 1 CCTTTCCCTC 13
35ULT 883
AA06019
AAA06019 standard; DNA; 13 BP.
AAA06019;
14-JUN-2000 (first entry)
CFTR gene analysis oligonucleotide probe SEQ ID NO:29.
CFTR; cystic fibrosis transmembrane conductance regulator; detection;
mutation; probe; human; hybridisation; ss.
Homo sapiens.
US6027880-A.
22-FEB-2000.
10-OCT-1995; 95US-00544381.

```

```

XX 26-OCT-1993; 93US-00143312.
PR 02-AUG-1994; 94US-00284064.
PR 26-OCT-1994; 94WO-US012305.
PR 02-AUG-1995; 95US-00510521.
XX (AFFY-) AFFYMETRIX INC.
XX Huang XC, Chee M, Lobban PE, Hubbell EA, Sheldon EL, Miyada CG;
PI Cronin MT, Lipshutz RJ, Morris MS, Fodor SPA;
XX WPI; 2000-194825/17.
XX An array of nucleic acid probes immobilized on a solid support, useful
PT for identifying mutations in the cystic fibrosis transmembrane
PT conductance regulator.
XX Disclosure; Col 75; 114pp; English.
XX The present invention describes an array of nucleic acid probes
CC immobilised on a solid support, which comprises: (1) a first probe set,
CC comprising probes with a segment of at least 6 nucleotides complementary
CC to the CFTR (cystic fibrosis transmembrane conductance regulator) gene,
CC where the segment includes at least 1 interrogation position
CC complementary to a nucleotide in the CFTR gene sequence; and (2) second,
CC third and fourth probe sets, each comprising probes identical to those in
CC (1) except that the interrogation position is occupied by a different
CC nucleotide. AAA05991 to AAA06240 represent CFTR gene analysis
CC oligonucleotide probes for use in the exemplification of the present
CC invention. The present invention also describes a method of comparing a
CC target nucleic acid with a reference sequence consisting of a
CC predetermined sequence of nucleotides, comprising: (a) hybridising a
CC sample comprising the target nucleic acid to an array of nucleic acid
CC probes immobilised on a solid support; (b) comparing the relative
CC specific binding of two corresponding probes from the first and second
CC probe sets; (c) assigning a nucleotide in the target sequence as the
CC complement of the interrogation position of the probe having the greater
CC specific binding; and (d) repeating (b) and (c) by comparing the relative
CC specific binding of a further two corresponding probes from the first and
CC second probe sets until each nucleotide of interest in the target
CC sequence has been assigned. The array is useful for analysis of the CFTR
CC gene, e.g. detection of mutations
XX
SQ Sequence 13 BP; 0 A; 3 C; 4 G; 6 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 915 TGGTCTTTGCCCT 927
| | | | |
| 1 TGGTGTTCCT 13
Db
RESULT 884
ABC93203
ID ABC93203 standard; DNA; 13 BP.
XX
AC ABC93203;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 93220 for detecting SNP TSC0023294.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
OS
XX WO200177384-A2.
PN
XX 10-OCT-2001.
PD

```

XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 93220; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 1 A; 7 C; 1 G; 4 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QV 928 TTATCCCTCTCTCT 940
Db 1 TTATCCGCCCTCT 13
RESULT 885
ABC93919/c
ID ABC93919 standard; DNA; 13 BP.
XX ABC93919;
XX 21-FEB-2002 (first entry)
XX Oligonucleotide SEQ ID NO 93936 for detecting SNP TSC0023471.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine

PT methylation status.
XX Claim 1; SEQ ID NO 93936; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 6 A; 2 C; 0 G; 5 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QV 941 TCATTGGTTTAAAT 953
Db 13 TAATAGGTTTAAAT 1
RESULT 886
ABC19417/c
ID ABC19417 standard; DNA; 13 BP.
XX ABC19417;
XX 20-FEB-2002 (first entry)
XX Oligonucleotide SEQ ID NO 19434 for detecting SNP TSC0004044.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 19434; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence

```

data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;

Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

/ 940 TTCATTGGTTTAA 952
) 13 TTAGTTGGTTTAA 1

RESULT 887
ABC20570
) ABC20570 standard; DNA; 13 BP.
) ABC20570;
) 20-FEB-2002 (first entry)
) Oligonucleotide SEQ ID NO 20587 for detecting SNP TSC0004194.
) SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
) peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
) central nervous system; gastrointestinal; respiratory; immune; metabolic.
) Homo sapiens.
) WO200177384-A2.
) 18-OCT-2001.
) 06-APR-2001; 2001WO-IB0000713.
) 07-APR-2000; 2000DE-01019173.
) (EPIG-) EPIGENOMICS AG.
) Olek A, Piepenbrock C, Berlin K;
) WPI; 2001-657177/75.
) Set of oligonucleotides, useful for diagnosis and cell typing, is
) designed to detect single-nucleotide polymorphisms and cytosine
) methylation status.
) Claim 1; SEQ ID NO 20587; 29pp + Sequence Listing; German.
) This invention describes novel oligonucleotide primers or peptide nucleic
) acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
) and cytosine methylation status in chemically pretreated genomic DNA. The
) oligonucleotides are used for diagnosis and/or prognosis of cancer and a
) range of diseases including immune system, gastrointestinal, respiratory,
) central nervous system, cardiovascular and metabolic disorders. The
) oligomers are also used for detecting cell type differentiation. ABC00010
) -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
) represent the oligomers described in the invention. NOTE: The sequence
) data for this patent did not form part of the printed specification, but
) was obtained in electronic format from WIPO at
) ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 2 A; 0 C; 3 G; 8 T; 0 U; 0 Other;

Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

/ 940 TTCATTGGTTTAA 952
) 1 TTGATTGGTTTAA 13

```

```

RESULT 888
ABC99316/c
ID ABC99316 standard; DNA; 13 BP.
XX AC ABC99316;
XX AC ABC99316;
XX 21-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 99333 for detecting SNP TSC0024681.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB0000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 99333; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences

SQ Sequence 13 BP; 4 A; 0 C; 8 G; 1 T; 0 U; 0 Other;

Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 924 CCTTTTATCCCTC 936
Db 13 CCTTCTATCCCCC 1

RESULT 889
ABF00947
ID ABF00947 standard; DNA; 13 BP.
XX AC ABF00947;
XX AC ABF00947;
XX 21-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 100944 for detecting SNP TSC0025123.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

```

KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
 OS Homo sapiens.
 XX WO200177384-A2.
 XX 18-OCT-2001.
 XX 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 100944; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 XX Sequence 13 BP; 0 A; 8 C; 1 G; 4 T; 0 U; 0 Other;
 SQ
 Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 932 CCCTCCCTCTTCAT 944
 DB ||||| |||||
 1 CCCTCCGCTTCCT 13
 RESULT 890
 ABC27659/C
 ID ABC27659 standard; DNA; 13 BP.
 AC ABC27659;
 XX 20-FEB-2002 (first entry)
 DE Oligonucleotide SEQ ID NO 27676 for detecting SNP TSC0007753.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 XX WO200177384-A2.
 XX 18-OCT-2001.
 XX 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 32815; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic

PA (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 27676; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 XX Sequence 13 BP; 10 A; 2 C; 0 G; 1 T; 0 U; 0 Other;
 SQ
 Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 938 TCCTCATTGCTTT 950
 DB ||||| |||||
 13 TTTTATTGCTTT 1
 RESULT 891
 ABC32798/C
 ID ABC32798 standard; DNA; 13 BP.
 AC ABC32798;
 XX 20-FEB-2002 (first entry)
 DE Oligonucleotide SEQ ID NO 32815 for detecting SNP TSC0010303.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 XX WO200177384-A2.
 XX 18-OCT-2001.
 XX 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 32815; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic

acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 6 A; 0 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

933 CCTCTCTTCATT 945

13 CCTCTCTTCATT 1

RESULT 892

ABC33273/C
ABC33273 standard; DNA; 13 BP.

ABC33273;

20-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 33290 for detecting SNP TSC0010604.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 33290; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 7 A; 2 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 940 TTCATTGGTTTAA 952

Db 13 TTGATTGATTAA 1

RESULT 893

ABC14808
ID ABC14808 standard; DNA; 13 BP.

XX ABC14808;

20-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 14815 for detecting SNP TSC0003331.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 14815; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 3 A; 0 C; 1 G; 9 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 941 TCATTGGTTTAAAT 953

Db 1 TTATTGTTTAAAT 13

RESULT 894

ABC66118
ID ABC66118 standard; DNA; 13 BP.


```

XX ABC66118;
AC
XX
XX 21-FEB-2002 (first entry)
DT
XX
XX Oligonucleotide SEQ ID NO 66135 for detecting SNP TSC0017384.
DE
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
OS
XX
XX WO200177384-A2.
PN
XX
XX 18-OCT-2001.
PD
XX
XX 06-APR-2001; 2001WO-IB000713.
PF
XX
XX 07-APR-2000; 2000DE-01019173.
PR
XX
XX (EPIG-) EPIGENOMICS AG.
PA
XX
XX Olek A, Piepenbrock C, Berlin K;
PI
XX
XX WPI; 2001-657177/75.
PS
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
PT
XX
XX Claim 1; SEQ ID NO 66135; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 1 A; 0 C; 5 G; 7 T; 0 U; 0 Other;
SQ
XX
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 944 TTGGTTTAATGTA 956
QY ||||| |||||
Db 1 TTGGTTTGGTGTA 13
XX
XX RESULT 895
XX ABF44004
XX ID ABF44004 standard; DNA; 13 BP.
XX
XX ABF44004;
AC
XX
XX 21-FEB-2002 (first entry)
DT
XX
XX Oligonucleotide SEQ ID NO 144001 for detecting SNP TSC0036164.
DE
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
OS
XX
XX

```

```

PN WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
PT
XX
XX Claim 1; SEQ ID NO 144001; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 0 A; 0 C; 3 G; 10 T; 0 U; 0 Other;
SQ
XX
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 908 TTTTCTTTGGTCT 920
QY ||||| |||||
Db 1 TTTTCTTTGGTCT 13
XX
XX RESULT 896
XX ABF97337
XX ID ABF97337 standard; DNA; 13 BP.
XX
XX ABF97337;
AC
XX
XX 22-FEB-2002 (first entry)
DT
XX
XX Oligonucleotide SEQ ID NO 197334 for detecting SNP TSC0048564.
DE
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
OS
XX
XX WO200177384-A2.
PN
XX
XX 18-OCT-2001.
PD
XX
XX 06-APR-2001; 2001WO-IB000713.
PF
XX
XX 07-APR-2000; 2000DE-01019173.
PR
XX
XX (EPIG-) EPIGENOMICS AG.
PA
XX
XX Olek A, Piepenbrock C, Berlin K;
PI
XX
XX WPI; 2001-657177/75.
DR

```

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 197334; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 2 A; 7 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

925 CTTTATCCCTCC 937

1 CCTATATCCCTCC 13

SULT 897

H23622

ABH23622 standard; DNA; 13 BP.

ABH23622;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 223599 for detecting SNP TSC0054425.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB0000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 223599; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The

CC oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

SQ Sequence 13 BP; 0 A; 0 C; 3 G; 10 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 910 TTTTGTGCTCTT 922

1 TTTTGTGCTCTT 13

RESULT 898

ABF49805/c

ID ABF49805 standard; DNA; 13 BP.

AC ABF49805;

DT 21-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 149802 for detecting SNP TSC0037798.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB0000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 149802; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

SQ Sequence 13 BP; 9 A; 4 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

QY 911 TCTTGGTCTTGG 923
DB 13 TTTTGGTCTTGG 1
RESULT 899
ABH25679/c
ID ABH25679 standard; DNA; 13 BP.
XX AC ABH25679;
XX DT 22-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 225656 for detecting SNP TSC0055005.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 225656; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX Sequence 13 BP; 8 A; 1 C; 0 G; 4 T; 0 U; 0 Other;
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 944 TTGGTTTAATGTA 956
DB 13 TTTGTTTAATATA 1
RESULT 900
ABF56004/c
ID ABF56004 standard; DNA; 13 BP.
XX AC ABF56004;
XX DT 21-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 232552 for detecting SNP TSC0056713.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.

```

```

DE Oligonucleotide SEQ ID NO 156001 for detecting SNP TSC0039366.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 156001; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX Sequence 13 BP; 6 A; 1 C; 4 G; 2 T; 0 U; 0 Other;
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 949 TTAATGTCGCT 961
DB 13 TTAATGTCGCT 1
RESULT 901
ABH32575
ID ABH32575 standard; DNA; 13 BP.
XX AC ABH32575;
XX DT 22-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 232552 for detecting SNP TSC0056713.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.

```

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 232552; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 1 A; 7 C; 0 G; 5 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

924 CCTTTATCCCTC 936

|||||

1 CCATTCCTCCCTC 13

SULT 902

ABF61760

ABF61760 standard; DNA; 13 BP.

ABF61760;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 161757 for detecting SNP TSC0040719.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB0000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

PS Claim 1; SEQ ID NO 161757; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 947 GTTTAATGTCG 959

|||||

1 GTTTATTGTATAG 13

RESULT 903

ABH12091/C

ID ABH12091 standard; DNA; 13 BP.

XX ABH12091;

DT 22-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 212068 for detecting SNP TSC0051693.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

PF 06-APR-2001; 2001WO-IB0000713.

PR 07-APR-2000; 2000DE-01019173.

PA (EPIG-) EPIGENOMICS AG.

PI Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

PS Claim 1; SEQ ID NO 212068; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at

```
CU ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 8 A; 3 C; 0 G; 2 T; 0 U; 0 Other;

Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

CY 904 GTCATTTTCTTGTG 916
DB |||||
13 GTGATTTTATTG 1

RESULT 904
ABH14404/c
ID ABH14404 standard; DNA; 13 BP.
AC ABH14404;
XX
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 214381 for detecting SNP TSC0052150.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 214381; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 13 BP; 6 A; 1 C; 5 G; 1 T; 0 U; 0 Other;

Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

CY 901 CTCGTCATTTTCT 913
DB |||||
13 CTCGCCATTTTCT 1

RESULT 905
ABH45585
ID ABH45585 standard; DNA; 13 BP.
AC ABH45585;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 245562 for detecting SNP TSC0059959.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 245562; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 13 BP; 3 A; 5 C; 0 G; 5 T; 0 U; 0 Other;

Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

CY 933 CCTCCTCTTCATT 945
DB |||||
1 CCTACTCTACATT 13

RESULT 906
ABH49970/c
ID ABH49970 standard; DNA; 13 BP.
AC ABH49970;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 249947 for detecting SNP TSC0061046.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
```

Homo sapiens.
 WO200177384-A2.
 18-OCT-2001.
 06-APR-2001; 2001WO-IB000713.
 07-APR-2000; 2000DE-01019173.
 (EPIG-) EPIGENOMICS AG.
 Olek A, Piepenbrock C, Berlin K;
 WPI; 2001-657177/75.
 Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
 Claim 1; SEQ ID NO 249947; 29pp + Sequence Listing; German.
 This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABT00010-ABT82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
 Sequence 13 BP; 5 A; 0 C; 7 G; 1 T; 0 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 932 CCTCTCTCTCAT 944
 13 CCTCATCTCTCT 1
 SUIT 907
 H56041/c
 ABH56041 standard; DNA; 13 BP.
 ABH56041;
 22-FEB-2002 (first entry)
 Oligonucleotide SEQ ID NO 256018 for detecting SNP TSC0062378.
 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 central nervous system; gastrointestinal; respiratory; immune; metabolic.
 Homo sapiens.
 WO200177384-A2.
 18-OCT-2001.
 06-APR-2001; 2001WO-IB000713.
 07-APR-2000; 2000DE-01019173.
 (EPIG-) EPIGENOMICS AG.

PI Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 256018; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABF9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABT00010-ABT82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 943 ATTGCTTTAATGT 955
 Db 13 ATTGCTATTATGT 1
 RESULT 908
 ABH56628
 ID ABH56628 standard; DNA; 13 BP.
 XX
 AC ABH56628;
 XX
 DT 22-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 256605 for detecting SNP TSC0009817.
 XX
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 XX WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 256605; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The

CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

SQ Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;

Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 940 TTCATTGGTTTAA 952
 Db 1 TTAATTGGTTTAA 13

RESULT 909
 ABH66304/c

ID ABH66304 standard; DNA; 13 BP.

AC ABH66304;

XX 22-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 266281 for detecting SNP TSC0000410.

XX SNP: single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.

XX Claim 1; SEQ ID NO 266281; 29pp + Sequence Listing; German.

CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

SQ Sequence 13 BP; 7 A; 0 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;

Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 931 TCCTCTCTCTCA 943
 Db 13 TTCCTTCTCTCA 1

RESULT 910

ID ABC99317 standard; DNA; 13 BP.

XX ABC99317;

XX 21-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 99334 for detecting SNP TSC0024681.

XX SNP: single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.

XX Claim 1; SEQ ID NO 99334; 29pp + Sequence Listing; German.

CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 1 A; 8 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;

Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 924 CCTTTATCCTC 936
 Db 1 CCTTCTATCCCC 13

RESULT 911

ID ABC52723 standard; DNA; 13 BP.

XX ABC52723;

```

21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 52740 for detecting SNP TSC0014605.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 52740; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 10 A; 2 C; 0 G; 1 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
904 GTCATTTTCTTGG 916
|||||
13 GTATTTTCTTGG 1
SULT 912
C07406/c
ABC07406 standard; DNA; 13 BP.
ABC07406;
20-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 7397 for detecting SNP TSC0002151.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 52740 for detecting SNP TSC0014605.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 52740; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 10 A; 2 C; 0 G; 1 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
904 GTCATTTTCTTGG 916
|||||
13 GTATTTTCTTGG 1
SULT 912
C07406/c
ABC07406 standard; DNA; 13 BP.
ABC07406;
20-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 7397 for detecting SNP TSC0002151.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 7397; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 4 A; 0 C; 7 G; 2 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
931 TCCCTCCTCTTCA 943
|||||
13 TCCCTCCTCTTCA 1
RESULT 913
ABC07561
ID ABC07561 standard; DNA; 13 BP.
AC ABC07561;
XX
AC ABC07561;
XX
20-FEB-2002 (first entry)
XX
Oligonucleotide SEQ ID NO 7552 for detecting SNP TSC0002177.
XX
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is

```


PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
PS Claim 1; SEQ ID NO 7552; 29pp + Sequence Listing; German.
XX
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
SQ Sequence 13 BP; 3 A; 5 C; 2 G; 3 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 955 TATCGTACCAC 967
Cb 1 TCTCGTACGAAC 13
RESULT 914
ABC84498/c
ID ABC84498 standard; DNA; 13 BP.
XX
XX ABC84498;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 84515 for detecting SNP TSC0021261.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 84515; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences

CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 13 BP; 6 A; 1 C; 3 G; 3 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 941 TCATGCTTTAAT 953
Db 13 TCATGCTTTAAT 1
RESULT 915
ABC85461
ID ABC85461 standard; DNA; 13 BP.
XX
XX ABC85461;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 85478 for detecting SNP TSC0021481.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 85478; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 13 BP; 3 A; 4 C; 0 G; 6 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 928 TTATCCCTCCTCT 940
|||||

XX
FA (EPIG-) EPIGENOMICS AG.
XX
FI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 140333; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 944 TTGGTTTAATGTA 956
DQ 1 TTGGTTTAATGTA 13

RESULT 919
ABF93486/C
ID ABF93486 standard; DNA; 13 BP.
XX
AC ABF93486;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 193483 for detecting SNP TSC0047598.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 193483; 29pp + Sequence Listing; German.
XX

CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 6 A; 1 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 931 TCCCTCCTCTTCA 943
DQ 13 TCTCTCCTCTTCA 1

RESULT 920
ABF44207
ID ABF44207 standard; DNA; 13 BP.
XX
AC ABF44207;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 144204 for detecting SNP TSC0036250.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 144204; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX

ISULT 922
IF97570

XX WO200177384-A2.
EN 18-OCT-2001.
PJ 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 148953; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 U; 0 Other;
SQ
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 944 TTGGTTTAAATGTA 956
Do 1 TTGGTTTAAATGTA 13
RESULT 924
ABF48957/C
ID ABF48957 standard; DNA; 13 BP.
XX ABF48957;
AC
XX 21-FEB-2002 (first entry)
DT
XX Oligonucleotide SEQ ID NO 148954 for detecting SNP TSC0037589.
DE
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
OS
XX WO200177384-A2.
PN
XX 18-OCT-2001.
PD
XX 06-APR-2001; 2001WO-IB000713.
PF
XX 07-APR-2000; 2000DE-01019173.
PR
XX (EPIG-) EPIGENOMICS AG.
PA
XX Olek A, Piepenbrock C, Berlin K;
XX
XX

DR WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 148954; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 8 A; 2 C; 0 G; 3 T; 0 U; 0 Other;
SQ
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 944 TTGGTTTAAATGTA 956
Do 13 TTGGTTTAAATGTA 1
RESULT 925
ABH28981
ID ABH28981 standard; DNA; 13 BP.
XX ABH28981;
AC
XX 22-FEB-2002 (first entry)
DT
XX Oligonucleotide SEQ ID NO 228958 for detecting SNP TSC0055846.
DE
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
OS
XX WO200177384-A2.
PN
XX 18-OCT-2001.
PD
XX 06-APR-2001; 2001WO-IB000713.
PF
XX 07-APR-2000; 2000DE-01019173.
PR
XX (EPIG-) EPIGENOMICS AG.
PA
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
DR
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 228958; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX

Claim 1; SEQ ID NO 264162; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 6 A; 4 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

940 TTCATTGGTTTAA 952
||| ||||| |||
13 TTGATTGGTTAA 1

RESULT 931

ABC96141/C

ABC96141 standard; DNA; 13 BP.

ABC96141;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 96158 for detecting SNP TSC0023904.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 96158; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but

CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 6 A; 2 C; 0 G; 5 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 941 TCATTGGTTTAA 953

||| ||||| |||

13 TAAATGGTTTAA 1

RESULT 932

ABC50444

ID ABC50444 standard; DNA; 13 BP.

XX AC

ABC50444;

DT 21-FEB-2002 (first entry)

XX DE Oligonucleotide SEQ ID NO 50461 for detecting SNP TSC0014180.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

OS Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX PF 06-APR-2001; 2001WO-IB000713.

XX PR 07-APR-2000; 2000DE-01019173.

XX PA (EPIG-) EPIGENOMICS AG.

XX PI Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

XX PS Claim 1; SEQ ID NO 50461; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 13 BP; 2 A; 0 C; 2 G; 9 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 904 GTCATTTCTTTG 916

||| ||||| |||

1 GTATTTATTG 13


```

RESULT 933
ABF00946/C
ID ABF00946 standard; DNA; 13 BP.
XX AC
XX ABF00946;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 100943 for detecting SNP TSC0025123.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
FN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 100943; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: the sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 4 A; 1 C; 8 G; 0 T; 0 U; 0 Other;
XX
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 932 CCTCTCCTTCAT 944
DB 13 CCTCTCCTTCCT 1
||||| |||||

RESULT 934
ABC07556/C
ID ABC07556 standard; DNA; 13 BP.
XX AC
XX ABC07556;
XX
DT 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 7547 for detecting SNP TSC0002177.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
FN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.

```

```

KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 7547; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: the sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 3 A; 1 C; 5 G; 4 T; 0 U; 0 Other;
XX
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 955 TATCGCTACCAAC 967
DB 13 TCTCGCTACCAAC 1
||||| |||||

RESULT 935
ABF10013
ID ABF10013 standard; DNA; 13 BP.
XX AC
XX ABF10013;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 110010 for detecting SNP TSC0027487.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
FN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.

```

Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 110010; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABG9989, ABF0010-ABF9989, ABH0010-ABH9989 and ABT0010-ABT82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 1 A; 9 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

931 TCCTCTCTCTTCA 943
|||||
1 TCCCCCTCTTCA 13

SULT 936
C66887/c
ABC66887 standard; DNA; 13 BP.

ABC66887;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 66904 for detecting SNP TSC0017534.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 66904; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC-ABG9989, ABF0010-ABF9989, ABH0010-ABH9989 and ABT0010-ABT82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

XX

SQ Sequence 13 BP; 7 A; 2 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QV 940 TTCATTGGTTTAA 952
|||||
13 TTTATTGGTTTAA 1

Db

RESULT 937
ABF20729/c

ID ABF20729 standard; DNA; 13 BP.

XX

AC ABF20729;

XX

DT 21-FEB-2002 (first entry)

XX

DE Oligonucleotide SEQ ID NO 120726 for detecting SNP TSC0030124.

XX

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX

OS Homo sapiens.

XX

XX WO200177384-A2.

XX

PD 18-OCT-2001.

XX

PF 06-APR-2001; 2001WO-IB000713.

XX

PR 07-APR-2000; 2000DE-01019173.

XX

PA (EPIG-) EPIGENOMICS AG.

XX

PI Olek A, Piepenbrock C, Berlin K;

XX

DR WPI; 2001-657177/75.

XX

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.

XX

PS Claim 1; SEQ ID NO 120726; 29pp + Sequence Listing; German.

XX

CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC-ABG9989, ABF0010-ABF9989, ABH0010-ABH9989 and ABT0010-ABT82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

XX

SQ Sequence 13 BP; 6 A; 3 C; 0 G; 4 T; 0 U; 0 Other;

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPITG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 135612; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABG9989, ABF0010-ABF9989, ABH0010-ABH9989 and ABI0010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 9 A; 3 C; 1 G; 0 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;

Best Local Similarity 84.6%; Pred. No. 1.1e+03;

Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

905 TCATTTCTTGG 917

13 TCGTTTTTTGG 1

RESULT 941

ABF39996

ABF39996 standard; DNA; 13 BP.

ABF39996;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 139993 for detecting SNP TSC0035065.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPITG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

PT Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

XX Claim 1; SEQ ID NO 139993; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABG9989, ABF0010-ABF9989, ABH0010-ABH9989 and ABI0010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;

Best Local Similarity 84.6%; Pred. No. 1.1e+03;

Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 941 TCATTTGTTTAAAT 953

DB 1 TCATTTGTTTAAAT 13

RESULT 942

ABF48106

ID ABF48106 standard; DNA; 13 BP.

XX AC ABF48106;

XX DT 21-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 148103 for detecting SNP TSC0037394.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPITG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

XX Claim 1; SEQ ID NO 148103; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABG9989, ABF0010-ABF9989, ABH0010-ABH9989 and ABI0010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 3 A; 1 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 944 TTGTTTAAATGTA 956
 |||||
 1 TTGTTTAAATGGA 13

RESULT 943
 ABF81689
 ID ABF81689 standard; DNA; 13 BP.
 XX
 AC ABF81689;
 XX
 DT 22-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 181686 for detecting SNP TSC0044924.
 XX
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 181686; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 0 A; 2 C; 0 G; 11 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 909 TTTCTTTGGTCTT 921

Db 1 TTTCTTTTCTT 13
 |||||
 |||||
 1 TTTCTTTTCTT 13

RESULT 944
 ABF82701/c
 ID ABF82701 standard; DNA; 13 BP.
 XX
 AC ABF82701;
 XX
 DT 22-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 182698 for detecting SNP TSC0045151.
 XX
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 182698; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 5 A; 4 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 947 GTTAAATGATCG 959
 |||||
 13 GTGTAAATGATAG 1

RESULT 945
 ABH08825
 ID ABH08825 standard; DNA; 13 BP.
 XX
 AC ABH08825;
 XX
 DT 22-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 208802 for detecting SNP TSC0008529.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB0000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.

Claim 1; SEQ ID NO 208802; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 2 A; 5 C; 0 G; 6 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

926 TTTTATCCTCTCT 938

1 TCTTATCCTCTCT 13

SULT 946

ABH43382

ABH43382 standard; DNA; 13 BP.

ABH43382;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 243359 for detecting SNP TSC0059367.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB0000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.

Claim 1; SEQ ID NO 243359; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 3 A; 1 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 940 TTCATTCGCTTAA 952

Db 1 TTTATCGGTTTAA 13

RESULT 947

ABH43992

ID ABH43992 standard; DNA; 13 BP.

XX

AC ABH43992;

XX 22-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 243969 for detecting SNP TSC0059515.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

OS Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB0000713.

XX 07-APR-2000; 2000DE-01019173.

PA (EPIG-) EPIGENOMICS AG.

PI Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.

PS Claim 1; SEQ ID NO 243969; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 945 TGGTTTAACTGAT 957
Db 1 TGATTATTGAT 13

RESULT 948
ABH48135
ID ABH48135 standard; DNA; 13 BP.
AC ABH48135;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 248112 for detecting SNP TSC0060637.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
XX
XX Claim 1; SEQ ID NO 248112; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 3 A; 3 C; 1 G; 6 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 941 TCATTGCTTTAAT 953
Db 1 TCATTGCTTTAAT 13

RESULT 949
ABH50324/C
ID ABH50324 standard; DNA; 13 BP.
XX
XX AC ABH50324;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 250301 for detecting SNP TSC0061116.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
XX
XX Claim 1; SEQ ID NO 250301; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 6 A; 0 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 933 CCTCCTCTTCTATT 945
Db 13 CCTCCTCTCTATT 1

RESULT 950

H50325
ABH50325 standard; DNA; 13 BP.
ABH50325;
22-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 250302 for detecting SNP TSC0061116.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 250302; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 1 A; 6 C; 0 G; 6 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
933 CCTCCTCTCTATT 945
|||||||
1 CCTCCTCTCTATT 13
SULT 951
H61551
ABH61551 standard; DNA; 13 BP.
ABH61551;
22-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 261528 for detecting SNP TSC0000806.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

OS Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 261528; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 2 A; 6 C; 0 G; 5 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 931 TCCTCTCTCTTCA 943
|||||||
1 TCCTCTCTCTTCA 13
Db
RESULT 952
ABC44353/c
ID ABC44353 standard; DNA; 13 BP.
XX ABC44353;
XX 21-FEB-2002 (first entry)
XX Oligonucleotide SEQ ID NO 44370 for detecting SNP TSC0013028.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
PI

XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 44370; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC000010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 XX Sequence 13 BP; 7 A; 4 C; 0 G; 2 T; 0 U; 0 Other;
 SQ Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 945 TGGTTTAATGTAT 957
 D5 13 TGGTGATTGTAT 1
 RESULT 953
 ABC20571/c
 ID ABC20571 standard; DNA; 13 BP.
 AC ABC20571;
 XX 20-FEB-2002 (first entry)
 XX Oligonucleotide SEQ ID NO 20588 for detecting SNP TSC0004194.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 OS WO200177384-A2.
 PN 18-OCT-2001.
 XX 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 PA Olek A, Piepenbrock C, Berlin K;
 PI WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 20588; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a

CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC000010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 XX Sequence 13 BP; 8 A; 3 C; 0 G; 2 T; 0 U; 0 Other;
 SQ Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 940 TTCAATGGTTTAA 952
 D5 13 TTGATTGGTTTAA 1
 RESULT 954
 ABC70860
 ID ABC70860 standard; DNA; 13 BP.
 AC ABC70860;
 XX 21-FEB-2002 (first entry)
 XX Oligonucleotide SEQ ID NO 70877 for detecting SNP TSC0018401.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 OS WO200177384-A2.
 PN 18-OCT-2001.
 XX 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 PA Olek A, Piepenbrock C, Berlin K;
 PI WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 70877; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC000010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 XX Sequence 13 BP; 0 A; 0 C; 3 G; 10 T; 0 U; 0 Other;
 SQ Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;

Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

911 TCTTTGGTCTTGG 923
 1 TTTTGGGTTTGG 13

SULT 955
 IC97277
 ABC97277 standard; DNA; 13 BP.
 ABC97277;
 21-FEB-2002 (first entry)
 Oligonucleotide SEQ ID NO 97294 for detecting SNP TSC0024130.
 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 central nervous system; gastrointestinal; respiratory; immune; metabolic.
 Homo sapiens.
 WO200177384-A2.
 18-OCT-2001.
 06-APR-2001; 2001WO-IB000713.
 07-APR-2000; 2000DE-01019173.
 (EPITG-) EPIGENOMICS AG.
 Olek A, Piepenbrock C, Berlin K;
 WPI; 2001-657177/75.
 Set of oligonucleotides, useful for diagnosis and cell typing, is
 designed to detect single-nucleotide polymorphisms and cytosine
 methylation status.
 Claim 1; SEQ ID NO 97294; 29pp + Sequence Listing; German.
 This invention describes novel oligonucleotide primers or peptide nucleic
 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 and cytosine methylation status in chemically pretreated genomic DNA. The
 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 range of diseases including immune system, gastrointestinal, respiratory,
 central nervous system, cardiovascular and metabolic disorders. The
 oligomers are also used for detecting cell type differentiation. ABC00010
 -ABC99989, ABP00010-ABP99989, ABH00010-ABH99989 and ABI00010-ABI82073
 represent the oligomers described in the invention. NOTE: The sequence
 data for this patent did not form part of the printed specification, but
 was obtained in electronic format from WIPO at
 ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 2 A; 7 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

924 CCTTTTATCCCTC 936
 1 CCTTTATCCAC 13

SULT 956
 C25060/c
 ABC25060 standard; DNA; 13 BP.
 ABC25060;

DT 20-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 25077 for detecting SNP TSC0006091.
 XX
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 FN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPITG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 WPI; 2001-657177/75.
 DR
 XX
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 25077; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABP00010-ABP99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

XX
 SQ Sequence 13 BP; 3 A; 0 C; 8 G; 2 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 930 ATCCCTCCTCTTC 942
 13 ATCCCTCCTCTTC 1

Db
 RESULT 957
 ABC25335/c
 ID ABC25335 standard; DNA; 13 BP.
 XX
 AC ABC25335;
 XX
 DT 20-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 25352 for detecting SNP TSC0006236.
 XX
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 FN WO200177384-A2.
 XX
 PD 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 25352; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 10 A; 3 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 909 TTTCTTTGGTCTT 921
DB 13 TTTTITGGTGT 1
RESULT 958
ABC75662/c
ID ABC75662 standard; DNA; 13 BP.
XX ABC75662;
AC
XX 21-FEB-2002 (first entry)
DE Oligonucleotide SEQ ID NO 75679 for detecting SNP TSC0019401.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.

PT methylation status.
XX Claim 1; SEQ ID NO 75679; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 4 A; 0 C; 7 G; 2 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 931 TCCCTCCTCTTCA 943
DB 13 TCCATCCTCTCCA 1
RESULT 959
ABC54452
ID ABC54452 standard; DNA; 13 BP.
XX ABC54452;
AC
XX 21-FEB-2002 (first entry)
DE Oligonucleotide SEQ ID NO 54469 for detecting SNP TSC0014932.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 54469; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence

```
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 5 A; 0 C; 1 G; 7 T; 0 U; 0 Other;

Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

941 TCATTGGTTTAAAT 953
||| ||| ||| |||
1 TAAATTGATTAAAT 13

RESULT 960
ABF04677/c
ABF04677 standard; DNA; 13 BP.
ABF04677;
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 104674 for detecting SNP TSC0026175.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB0000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 104674; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 9 A; 3 C; 0 G; 1 T; 0 U; 0 Other;

Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

911 TCATTGGTTCTTG 923
||| ||| ||| |||
13 TAAATTGGTTTGG 1

data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 5 A; 0 C; 1 G; 7 T; 0 U; 0 Other;

Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

941 TCATTGGTTTAAAT 952
||| ||| ||| |||
1 TAAATTGGTTTAA 13

RESULT 961
ABF12122
ABF12122 standard; DNA; 13 BP.
XX
AC ABF12122;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 112119 for detecting SNP TSC0027988.
XX
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB0000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 112119; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 U; 0 Other;

Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

940 TTCATTGGTTTAA 952
||| ||| ||| |||
1 TTAATTGGTTTAA 13

RESULT 962
ABF14858
ABF14858 standard; DNA; 13 BP.
XX
AC ABF14858;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 114855 for detecting SNP TSC0028764.
XX
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
```

KM peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 OS
 XX WO200177384-A2.
 XX
 XX 18-OCT-2001.
 XX
 XX 06-APR-2001; 2001WO-IB000713.
 XX
 XX 07-APR-2000; 2000DE-01019173.
 XX
 XX (EPIG-) EPIGENOMICS AG.
 XX
 XX Olek A, Piepenbrock C, Berlin K;
 XX
 XX WPI; 2001-657177/75.
 XX
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 XX Claim 1; SEQ ID NO 114855; 29pp + Sequence Listing; German.
 XX
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 XX Sequence 13 BP; 2 A; 0 C; 2 G; 9 T; 0 U; 0 Other;
 SQ
 Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 905 TCATTTCTTTGG 917
 Db 1 TAATTTTCTTTGG 13
 RESULT 963
 ABC91400
 ID ABC91400 standard; DNA; 13 BP.
 AC
 AC ABC91400;
 XX
 XX 21-FEB-2002 (first entry)
 XX
 XX Oligonucleotide SEQ ID NO 91417 for detecting SNP TSC0022889.
 DE
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 XX Homo sapiens.
 OS
 XX WO200177384-A2.
 XX
 XX 18-OCT-2001.
 XX
 XX 06-APR-2001; 2001WO-IB000713.
 XX
 XX 07-APR-2000; 2000DE-01019173.
 XX

PA (EPIG-) EPIGENOMICS AG.
 XX
 XX Olek A, Piepenbrock C, Berlin K;
 XX
 XX WPI; 2001-657177/75.
 XX
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 XX Claim 1; SEQ ID NO 91417; 29pp + Sequence Listing; German.
 XX
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 XX Sequence 13 BP; 2 A; 0 C; 2 G; 9 T; 0 U; 0 Other;
 SQ
 Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 908 TTTTCTTTGGTCT 920
 Db 1 TTTTATTGTAT 13
 RESULT 964
 ABF27948/C
 ID ABF27948 standard; DNA; 13 BP.
 XX
 XX ABF27948;
 AC
 XX 21-FEB-2002 (first entry)
 XX
 XX Oligonucleotide SEQ ID NO 127945 for detecting SNP TSC0032026.
 DE
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 XX Homo sapiens.
 OS
 XX WO200177384-A2.
 XX
 XX 18-OCT-2001.
 XX
 XX 06-APR-2001; 2001WO-IB000713.
 XX
 XX 07-APR-2000; 2000DE-01019173.
 XX
 XX (EPIG-) EPIGENOMICS AG.
 XX
 XX Olek A, Piepenbrock C, Berlin K;
 XX
 XX WPI; 2001-657177/75.
 XX
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 XX Claim 1; SEQ ID NO 127945; 29pp + Sequence Listing; German.
 XX
 XX This invention describes novel oligonucleotide primers or peptide nucleic

acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 6 A; 0 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
932 CCTCTCTCTTCA 944
13 CCTCTCTTCTT 1

RESULT 965
ABF29010
ABF29010 standard; DNA; 13 BP.

ABF29010;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 129007 for detecting SNP TSC0032298.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB0000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 129007; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 2 A; 0 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 941 TCATTGGTTTAA 953

DB 1 TTATTGGTTTAA 13

RESULT 966
ABF31354/c
ID ABF31354 standard; DNA; 13 BP.

AC ABF31354;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 131351 for detecting SNP TSC0032783.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB0000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 131351; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 7 A; 0 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 931 TCCCTCTCTTCA 943

DB 13 TCCCTCTTCTTCA 1

RESULT 967
ABF39539/c
ID ABF39539 standard; DNA; 13 BP.

```

XX ABF39539;
AC
XX
XX 21-FEB-2002 (first entry)
DT
XX
XX Oligonucleotide SEQ ID NO 139536 for detecting SNP TSC0034938.
DE
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
OS
XX
XX WO200177384-A2.
IN
XX
XX 18-OCT-2001.
PD
XX
XX 06-APR-2001; 2001WO-IB000713.
PF
XX
XX 07-APR-2000; 2000DE-01019173.
PR
XX
XX (EPIG-) EPIGENOMICS AG.
PA
XX
XX Olek A, Piepenbrock C, Berlin K;
PI
XX
XX WPI; 2001-657177/75.
DR
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
PT
XX
XX Claim 1; SEQ ID NO 139536; 29pp + Sequence Listing; German.
PS
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;
SQ
XX
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 944 TTGGTTTAAGTA 956
DB 13 TTGATTGATGTA 1
||| ||||| |||
||| ||||| |||

RESULT 968
ABF44206/c
ID ABF44206 standard; DNA; 13 BP.
XX
XX ABF44206;
AC
XX
XX 21-FEB-2002 (first entry)
DT
XX
XX Oligonucleotide SEQ ID NO 144203 for detecting SNP TSC0036250.
DE
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
OS
XX

```

```

PN WO200177384-A2.
XX
XX 18-OCT-2001.
PD
XX
XX 06-APR-2001; 2001WO-IB000713.
PF
XX
XX 07-APR-2000; 2000DE-01019173.
PR
XX
XX (EPIG-) EPIGENOMICS AG.
PA
XX
XX Olek A, Piepenbrock C, Berlin K;
PI
XX
XX WPI; 2001-657177/75.
DR
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
PT
XX
XX Claim 1; SEQ ID NO 144203; 29pp + Sequence Listing; German.
PS
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 5 A; 0 C; 5 G; 3 T; 0 U; 0 Other;
SQ
XX
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 933 CCTCCTCTTCATT 945
DB 13 CCACCTCTTAATT 1
||| ||||| |||
||| ||||| |||

RESULT 969
ABF97336/c
ID ABF97336 standard; DNA; 13 BP.
XX
XX ABF97336;
AC
XX
XX 22-FEB-2002 (first entry)
DT
XX
XX Oligonucleotide SEQ ID NO 197333 for detecting SNP TSC0048564.
DE
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
OS
XX
XX WO200177384-A2.
IN
XX
XX 18-OCT-2001.
PD
XX
XX 06-APR-2001; 2001WO-IB000713.
PF
XX
XX 07-APR-2000; 2000DE-01019173.
PR
XX
XX (EPIG-) EPIGENOMICS AG.
PA
XX
XX Olek A, Piepenbrock C, Berlin K;
PI
XX
XX WPI; 2001-657177/75.
DR

```

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 197333; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 4 A; 0 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

925 CTTTATCCCTCC 937
13 CCTATATCCCTCC 1

RESULT 970
ABF98050
ABF98050 standard; DNA; 13 BP.
ABF98050;
22-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 198047 for detecting SNP TSC0048746.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 198047; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The

oligomers are also used for detecting cell type differentiation. ABC00010 -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 2 A; 0 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

944 TTGTTTAAATGTA 956
1 TTGTTTAAATGTA 13

RESULT 971
ABF48102
ID ABF48102 standard; DNA; 13 BP.
XX AC ABF48102;
XX DT 21-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 148099 for detecting SNP TSC0037394.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 148099; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 944 TTGGTTTAATGTA 956
 DB 1 TTGGTTTAATGGA 13

RESULT 972
 ABH23623/C
 ID ABH23623 standard; DNA; 13 BP.
 XX AC ABH23623;
 XX DT 22-FEB-2002 (first entry)
 XX DE Oligonucleotide SEQ ID NO 223600 for detecting SNP TSC0054425.
 XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX OS Homo sapiens.
 XX PN WO200177384-A2.
 XX PD 18-OCT-2001.
 XX PF 06-APR-2001; 2001WO-IB000713.
 XX PR 07-APR-2000; 2000DE-01019173.
 XX PA (EPIG-) EPIGENOMICS AG.
 XX PI Olek A, Piepenbrock C, Berlin K;
 XX WI WI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 designed to detect single-nucleotide polymorphisms and cytosine
 methylation status.
 XX Claim 1; SEQ ID NO 223600; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 and cytosine methylation status in chemically pretreated genomic DNA. The
 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 range of diseases including immune system, gastrointestinal, respiratory,
 central nervous system, cardiovascular and metabolic disorders. The
 oligomers are also used for detecting cell type differentiation. ABC00010
 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 represent the oligomers described in the invention. NOTE: The sequence
 data for this patent did not form part of the printed specification, but
 was obtained in electronic format from WIPO at
 ftp.wipo.int/pub/published_pct_sequences
 XX Sequence 13 BP; 10 A; 3 C; 0 G; 0 T; 0 U; 0 Other;
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 and cytosine methylation status in chemically pretreated genomic DNA. The
 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 range of diseases including immune system, gastrointestinal, respiratory,
 central nervous system, cardiovascular and metabolic disorders. The
 oligomers are also used for detecting cell type differentiation. ABC00010
 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 represent the oligomers described in the invention. NOTE: The sequence
 data for this patent did not form part of the printed specification, but
 was obtained in electronic format from WIPO at
 ftp.wipo.int/pub/published_pct_sequences
 XX Sequence 13 BP; 10 A; 3 C; 0 G; 0 T; 0 U; 0 Other;
 XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 910 TTCTTGGTCTTT 922
 DB 13 TTCTTGGTCTTT 1

RESULT 973
 ABH28586
 ID ABH28586 standard; DNA; 13 BP.
 XX AC ABH28586;
 XX DT 22-FEB-2002 (first entry)
 XX DE Oligonucleotide SEQ ID NO 179430 for detecting SNP TSC0044419.
 XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX OS Homo sapiens.
 XX PN WO200177384-A2.
 XX PD 18-OCT-2001.
 XX PF 06-APR-2001; 2001WO-IB000713.

DE Oligonucleotide SEQ ID NO 228563 for detecting SNP TSC0009481.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX OS Homo sapiens.
 XX PN WO200177384-A2.
 XX PD 18-OCT-2001.
 XX PF 06-APR-2001; 2001WO-IB000713.
 XX PR 07-APR-2000; 2000DE-01019173.
 XX PA (EPIG-) EPIGENOMICS AG.
 XX PI Olek A, Piepenbrock C, Berlin K;
 XX WI WI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 designed to detect single-nucleotide polymorphisms and cytosine
 methylation status.
 XX Claim 1; SEQ ID NO 228563; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 and cytosine methylation status in chemically pretreated genomic DNA. The
 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 range of diseases including immune system, gastrointestinal, respiratory,
 central nervous system, cardiovascular and metabolic disorders. The
 oligomers are also used for detecting cell type differentiation. ABC00010
 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 represent the oligomers described in the invention. NOTE: The sequence
 data for this patent did not form part of the printed specification, but
 was obtained in electronic format from WIPO at
 ftp.wipo.int/pub/published_pct_sequences
 XX Sequence 13 BP; 3 A; 0 C; 1 G; 9 T; 0 U; 0 Other;
 XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 944 TTGGTTTAATGTA 956
 DB 1 TTGGTTTAATTTA 13

RESULT 974
 ABF79433
 ID ABF79433 standard; DNA; 13 BP.
 XX AC ABF79433;
 XX DT 22-FEB-2002 (first entry)
 XX DE Oligonucleotide SEQ ID NO 179430 for detecting SNP TSC0044419.
 XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX OS Homo sapiens.
 XX PN WO200177384-A2.
 XX PD 18-OCT-2001.
 XX PF 06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
Claim 1; SEQ ID NO 179430; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 2 A; 4 C; 0 G; 7 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
924 CCTTTATCCCTC 936
|||||||
1 CCTTTATCTTC 13
SULT 975
H32574/C
ABH32574 standard; DNA; 13 BP.
ABH32574;
22-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 232551 for detecting SNP TSC0056713.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

PS Claim 1; SEQ ID NO 232551; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 5 A; 0 C; 7 G; 1 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 924 CCTTTATCCCTC 936
DB 13 CCATTCTCCCTC 1
RESULT 976
ABF57605/C
ID ABF57605 standard; DNA; 13 BP.
XX
AC ABF57605;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 157602 for detecting SNP TSC0039698.
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
XX
PS Claim 1; SEQ ID NO 157602; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at

```
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 7 A; 2 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 943 ATTGGTTTAATGT 955
DB ||||| |||||
13 ATTGGTATAATT 1

RESULT 977
ABF58738/c
ID ABF58738 standard; DNA; 13 BP.
AC
XX ABF58738;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 158735 for detecting SNP TSC0039945.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 158735; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 6 A; 1 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 941 TCATTGGTTTAAT 953
DB ||||| |||||
13 TCATTGGTTCAAT 1

RESULT 978
ABH35195
ID ABH35195 standard; DNA; 13 BP.
AC
XX ABH35195;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 235172 for detecting SNP TSC0057429.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 235172; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 0 A; 4 C; 0 G; 9 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 926 TTTTATCCCTCCT 938
DB ||||| |||||
1 TTTTCTCTCCT 13

RESULT 979
ABH35272
ID ABH35272 standard; DNA; 13 BP.
AC
XX ABH35272;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 235249 for detecting SNP TSC0057443.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
```

Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
Claim 1; SEQ ID NO 235249; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 1 A; 0 C; 2 G; 10 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
1 GGTTATTTT 13
903 GGTCATTTTCCTT 915
|||||
1 GGTTATTTT 13
SULT 980
H35273/c
ABH35273 standard; DNA; 13 BP.
ABH35273;
22-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 235250 for detecting SNP TSC0057443.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.

PI Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 235250; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 10 A; 2 C; 0 G; 1 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 903 GGTCATTTTCCTT 915
|||||
13 GGTTATTTT 1
Db 13 GGTTATTTT 1
RESULT 981
ABH1913
ID ABH1913 standard; DNA; 13 BP.
XX
AC ABH1913;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 211890 for detecting SNP TSC0051655.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 211890; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The

CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 2 A; 2 C; 0 G; 9 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 918 TCCTTGCCTTTTA 930
DB 1 TATTTTCCTTTTA 13

RESULT 982
ABF62876/c
ID ABF62876 standard; DNA; 13 BP.
XX
AC ABF62876;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 162873 for detecting SNP TSC0040950.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
EN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 162873; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 3 A; 0 C; 8 G; 2 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 918 TCCTTGCCTTTTA 930
DB 1 TATTTTCCTTTTA 13

RESULT 982
ABF62876/c
ID ABF62876 standard; DNA; 13 BP.
XX
AC ABF62876;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 162873 for detecting SNP TSC0040950.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
EN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 162873; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 3 A; 0 C; 8 G; 2 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 918 TCCTTGCCTTTTA 930
DB 1 TATTTTCCTTTTA 13

RESULT 984
ABH49488
ID ABH49488 standard; DNA; 13 BP.
XX
AC ABH49488;

Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 932 CCTTCCTCTTCAT 944
DB 13 CCTCCACCTCAT 1

RESULT 983
ABF65506
ID ABF65506 standard; DNA; 13 BP.
XX
AC ABF65506;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 165503 for detecting SNP TSC0041502.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
EN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 165503; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 2 A; 1 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 940 TTCATTGGTTTAA 952
DB 1 TTCGGTGGTTTAA 13

RESULT 984
ABH49488
ID ABH49488 standard; DNA; 13 BP.
XX
AC ABH49488;

[illegible]

PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.

XX Claim 1; SEQ ID NO 18728; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC9989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences

SQ Sequence 13 BP; 10 A; 2 C; 0 G; 1 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 909 TTCTTTGGTCTT 921

DB 13 TTTTGTGTTAT 1

RESULT 987

ABC01431/c

ID ABC01431 standard; DNA; 13 BP.

XX ABC01431;

XX 20-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 1422 for detecting SNP TSC0000501.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.

XX Claim 1; SEQ ID NO 1422; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC9989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073

CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

SQ Sequence 13 BP; 7 A; 2 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 940 TTCAATTGGTTTAA 952

DB 13 TTTATTGGTATAA 1

RESULT 988

ABC76532

ID ABC76532 standard; DNA; 13 BP.

XX ABC76532;

XX 21-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 76549 for detecting SNP TSC0019571.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.

XX Claim 1; SEQ ID NO 76549; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC9989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences

SQ Sequence 13 BP; 0 A; 0 C; 3 G; 10 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 910 TTCTTTGGTCTTT 922

DB 13 TTTTGTGTTAT 1

```

1 TTGTTGGTTTTT 13
SULT 989
C02476
ABC02476 standard; DNA; 13 BP.
ABC02476;
20-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 2467 for detecting SNP TSC0000994.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 2467; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 4 A; 0 C; 4 G; 5 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
943 ATTGGTTTAATGT 955
|||||
1 ATAGGTGAATGT 13
SULT 990
C09420/C
ABC09420 standard; DNA; 13 BP.
ABC09420;
20-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 9411 for detecting SNP TSC0002484.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
OS Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 9411; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX Sequence 13 BP; 9 A; 1 C; 2 G; 1 T; 0 U; 0 Other;
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 918 TCTTTGCCTTTTA 930
DB 13 TCTTTTCGTTTTA 1
|||||
RESULT 991
ABC85813/C
ID ABC85813 standard; DNA; 13 BP.
XX AC ABC85813;
XX DT 21-FEB-2002 (first entry)
XX XX Oligonucleotide SEQ ID NO 85830 for detecting SNP TSC0021562.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.

```


XX (EPIG-) EPIGENOMICS AG.
PA Olek A, Piepenbrock C, Berlin K;
PI WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 85830; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 9 A; 2 C; 0 G; 2 T; 0 U; 0 Other;
SQ
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 905 TCATTTCCTTGG 917
DB 13 TTATTTAATTGG 1
RESULT 992
ABC63521/c
ID ABC63521 standard; DNA; 13 BP.
XX AC ABC63521;
XX 21-FEB-2002 (first entry)
XX Oligonucleotide SEQ ID NO 63538 for detecting SNP TSC0016784.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
OS
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
PI Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 63538; 29pp + Sequence Listing; German.
XX

CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 9 A; 2 C; 0 G; 2 T; 0 U; 0 Other;
SQ
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 945 TGGTTTAATGTAT 957
DB 13 TGGTTTAATTTT 1
RESULT 993
ABC66119/c
ID ABC66119 standard; DNA; 13 BP.
XX AC ABC66119;
XX 21-FEB-2002 (first entry)
XX Oligonucleotide SEQ ID NO 66136 for detecting SNP TSC0017384.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
OS
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
PI Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 66136; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX

```

Sequence 13 BP; 7 A; 5 C; 0 G; 1 T; 0 U; 0 Other;
Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

      944 TTGGTTTAATGTA 956
      ||||| |||||
      13 TTGGTTTGGTGTA 1

RESULT 994
ABF20843/c
ABF20843 standard; DNA; 13 BP.
ABF20843;
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 120840 for detecting SNP TSC0030156.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 120840; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 9 A; 1 C; 0 G; 3 T; 0 U; 0 Other;
Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

      945 TGGTTTAATGTA 957
      ||||| |||||
      13 TTGTTTAATTTAT 1

SULT. 995
F35614
ABF20843 standard; DNA; 13 BP.
ABF20843;
22-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 195595 for detecting SNP TSC0048124.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 135611; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 0 A; 1 C; 3 G; 9 T; 0 U; 0 Other;
Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

      905 TCATTTTCTTTGG 917
      ||||| |||||
      1 TCGTTTTTTTGG 13

RESULT 996
ABF95598/c
ABF95598 standard; DNA; 13 BP.
ABF95598;
22-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 195595 for detecting SNP TSC0048124.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 135611; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

```


central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 0 A; 0 C; 4 G; 9 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

911 TCTTTGGTCTTGG 923

1 TTTTGGTGTGG 13

RESULT 999

ABF51815/c

ABF51815 standard; DNA; 13 BP.

ABF51815;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 151812 for detecting SNP TSC0038352.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic. Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIS-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 151812; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 7 A; 2 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 940 TTCATTGGTTAA 952

Db 13 TTTATGGATTAA 1

RESULT 1000

ABF52196/c

ID ABF52196 standard; DNA; 13 BP.

XX AC ABF52196;

XX DT 21-FEB-2002 (first entry)

XX DE Oligonucleotide SEQ ID NO 152193 for detecting SNP TSC0038456.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic. Homo sapiens.

XX PN WO200177384-A2.

XX PD 18-OCT-2001.

XX PF 06-APR-2001; 2001WO-IB000713.

XX PR 07-APR-2000; 2000DE-01019173.

XX PA (EPIS-) EPIGENOMICS AG.

XX PI Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 152193; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 10 A; 0 C; 2 G; 1 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 918 TCTTTGCCCTTTAA 930

Db 13 TCTTTCTTTTAA 1

RESULT 1001

ABF77449

ID ABF77449 standard; DNA; 13 BP.

XX AC ABF77449;

XX DT 22-FEB-2002 (first entry)

```

XX Oligonucleotide SEQ ID NO 177446 for detecting SNP TSC0010778.
DE
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
OS
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 177446; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 1 A; 5 C; 0 G; 7 T; 0 U; 0 Other;
SQ
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 931 TCCCTCCTCTCA 943
DQ 1 TCTCTCCTCTTA 13
|||||
RESULT 1002
ID ABF78483/c
XX ABF78483 standard; DNA; 13 BP.
XX
XX ABF78483;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 178480 for detecting SNP TSC0044196.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 177446; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 1 A; 5 C; 0 G; 7 T; 0 U; 0 Other;
SQ
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 931 TCCCTCCTCTCA 943
DQ 1 TCTCTCCTCTTA 13
|||||
RESULT 1002
ID ABF78483/c
XX ABF78483 standard; DNA; 13 BP.
XX
XX ABF78483;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 178480 for detecting SNP TSC0044196.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.

```

```

PF 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
XX Claim 1; SEQ ID NO 178480; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 9 A; 2 C; 0 G; 2 T; 0 U; 0 Other;
SQ
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 945 TGGTTTAATGTAT 957
DQ 13 TTGTTTATGTAT 1
|||||
RESULT 1003
ABF82700
ID ABF82700 standard; DNA; 13 BP.
XX
XX ABF82700;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 182697 for detecting SNP TSC0045151.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.

```

Claim 1; SEQ ID NO 182697; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 4 A; 0 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

947 GTTAAATGATCG 959

|||||
1 GTGTAATGTATAG 13

RESULT 1004

ABF63798/c

ABF63798 standard; DNA; 13 BP.

ABF63798;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 163795 for detecting SNP TSC0010383.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB0000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 163795; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but

CC was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 6 A; 0 C; 7 G; 0 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 932 CCTCTCTTTCAT 944

|||||
13 CCTCTCTTTCCT 1

RESULT 1005

ABF64970/c

ABF64970 standard; DNA; 13 BP.

XX

AC ABF64970;

XX

DT 22-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 164967 for detecting SNP TSC0006375.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB0000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 164967; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 7 A; 0 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 927 TTTATCCTCTCTC 939

|||||
13 TTTATCCTCTACT 1

Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
Claim 1; SEQ ID NO 9407; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABT00010-ABT99989 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 9 A; 0 C; 2 G; 2 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
918 TCTTTGCGTTTGA 930
|||||
13 TCTTTTCATTTTA 1
-SULT 1009
-C09421
ABC09421 standard; DNA; 13 BP.
ABC09421;
20-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 9412 for detecting SNP TSC0002484.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
Claim 1; SEQ ID NO 9412; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABT00010-ABT99989
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 1 A; 2 C; 1 G; 9 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 918 TCTTTGCGTTTGA 930
|||||
1 TCTTTTCGTTTGA 13
Db
RESULT 1010
ABC36697/c
ID ABC36697 standard; DNA; 13 BP.
XX AC ABC36697;
XX AC ABC36697;
DT 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 36714 for detecting SNP TSC0011500.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 36714; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABT00010-ABT99989
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 9 A; 2 C; 0 G; 2 T; 0 U; 0 Other;


```

Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 945 TGGTTTAATGTAT 957
DB 13 TGGTTTATTGTAT 1

RESULT 1011
ABC39368
ID ABC39368 standard; DNA; 13 BP.
XX
AC ABC39368;
XX
DT 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 39385 for detecting SNP TSC0012055.
XX
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
PI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 39385; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 2 A; 0 C; 2 G; 9 T; 0 U; 0 Other;

Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 944 TTGGTTTAATGTA 956
DB 1 TTGGTTTATTGTA 13

RESULT 1012
ABC64466/c
ID ABC64466 standard; DNA; 13 BP.
XX

```

```

AC ABC64466;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 64483 for detecting SNP TSC0017004.
XX
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
PI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 64483; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 5 A; 0 C; 5 G; 3 T; 0 U; 0 Other;

Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 931 TCCCTCCTCTTCA 943
DB 13 TCCATACCTCTTCA 1

RESULT 1013
ABC65244
ID ABC65244 standard; DNA; 13 BP.
XX
AC ABC65244;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 65261 for detecting SNP TSC0017182.
XX
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.

```

```

18-OCT-2001.
06-APR-2001; 2001WO-IB0000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 65261; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 0 A; 0 C; 4 G; 9 T; 0 U; 0 Other;
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 0 A; 0 C; 4 G; 9 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
911 TCTTTGGTCTTTG 923
1 TCTTTGGTCTTTG 13
SULT 1014
C66551
ABC66551 standard; DNA; 13 BP.
ABC66551;
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 66568 for detecting SNP TSC0017484.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB0000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 65261; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 0 A; 0 C; 4 G; 9 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
911 TCTTTGGTCTTTG 923
1 TCTTTGGTCTTTG 13
SULT 1014
C66551
ABC66551 standard; DNA; 13 BP.
ABC66551;
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 66568 for detecting SNP TSC0017484.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB0000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 65261; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 0 A; 0 C; 4 G; 9 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
911 TCTTTGGTCTTTG 923
1 TCTTTGGTCTTTG 13
SULT 1015
ABF34214/c
ID ABF34214 standard; DNA; 13 BP.
XX AC ABF34214;
XX DT 21-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 134211 for detecting SNP TSC0033456.
XX SN; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB0000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX PS Claim 1; SEQ ID NO 134211; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligonucleotides are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 4 A; 4 C; 1 G; 4 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
OY 953 TGTATCGCTACCA 965
Db 1 TTTAAGGTACCA 13
RESULT 1015
ABF34214/c
ID ABF34214 standard; DNA; 13 BP.
XX AC ABF34214;
XX DT 21-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 134211 for detecting SNP TSC0033456.
XX SN; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB0000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX PS Claim 1; SEQ ID NO 134211; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010

```

CC -ABCG9989, ABFG0010-ABFG9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 8 A; 0 C; 3 G; 2 T; 0 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 921 TTGCTTTTATCC 933
 || |||||
 Db 13 TTATCTTTATCC 1
 RESULT 1016
 ABFG9599
 ID ID ABFG9599 standard; DNA; 13 BP.
 XX
 AC ABFG9599;
 XX
 DT 22-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 195596 for detecting SNP TSC0048124.
 XX
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 OS WPI; 2001-657177/75.
 XX
 PN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 OS WPI; 2001-657177/75.
 XX
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 195596; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABCG9989, ABFG0010-ABFG9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 2 A; 3 C; 0 G; 8 T; 0 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 920 TTGCTTTTATCC 932
 || |||||
 Db 13 TTATCTTTATCC 1
 RESULT 1018
 ABFG52197
 ID ID ABFG52197 standard; DNA; 13 BP.
 XX
 AC ABFG52197;
 XX
 DT 21-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 152194 for detecting SNP TSC0038456.

Db 1 TTTCACCTTTATC 13
 |||||
 RESULT 1017
 ABH21401
 ID ID ABH21401 standard; DNA; 13 BP.
 XX
 AC ABH21401;
 XX
 DT 22-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 221378 for detecting SNP TSC0053879.
 XX
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 OS WPI; 2001-657177/75.
 XX
 PN Set of oligonucleotides, useful for diagnosis and cell typing, is
 PN designed to detect single-nucleotide polymorphisms and cytosine
 PN methylation status.
 XX
 PS Claim 1; SEQ ID NO 221378; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABCG9989, ABFG0010-ABFG9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 0 A; 7 C; 0 G; 6 T; 0 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 928 TTATCCCTCCCTCT 940
 || |||||
 Db 1 TTATCCCTCCCT 13
 RESULT 1018
 ABFG52197
 ID ID ABFG52197 standard; DNA; 13 BP.
 XX
 AC ABFG52197;
 XX
 DT 21-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 152194 for detecting SNP TSC0038456.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.

Claim 1; SEQ ID NO 152194; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 1 A; 2 C; 0 G; 10 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

918 TCTTGCCTTTTA 930

||||| |||||
1 TCTTTCTTTT 13

SULT 1019

H29804/C

ABH29804 standard; DNA; 13 BP.

ABH29804;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 229781 for detecting SNP TSC0056047.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

PR 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

PI Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

DR Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.

XX Claim 1; SEQ ID NO 229781; 29pp + Sequence Listing; German.

CC This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 13 BP; 7 A; 0 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 931 TCCCTCCTCTTCA 943

||||| |||||
13 TCCCTCCTTTCA 1

RESULT 1020

ABH08824/C

ID ABH08824 standard; DNA; 13 BP.

XX AC ABH08824;

XX DT 22-FEB-2002 (first entry)

XX DE Oligonucleotide SEQ ID NO 208801 for detecting SNP TSC00808529.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX OS Homo sapiens.

XX WO200177384-A2.

XX PD 18-OCT-2001.

XX PF 06-APR-2001; 2001WO-IB000713.

XX PR 07-APR-2000; 2000DE-01019173.

XX PA (EPIG-) EPIGENOMICS AG.

XX PI Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.

XX Claim 1; SEQ ID NO 208801; 29pp + Sequence Listing; German.

XX CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX CC
SQ Sequence 13 BP; 6 A; 0 C; 5 G; 2 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 926 TTTTATCCCTCCT 938
DB 13 TCTATCATCTCCT 1
RESULT 1021
ABH10320/C
ID ABH10320 standard; DNA; 13 BP.
XX AC
XX ABH10320;
XX DT 22-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 210297 for detecting SNP TSC0005129.
XX SNF; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 210297; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX CC

XX SQ Sequence 13 BP; 7 A; 0 C; 3 G; 3 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 937 CTCTTCATTGGTT 949
DB 13 CTCTTCATTAAAT 1
RESULT 1022
ABH15749/C
ID ABH15749 standard; DNA; 13 BP.
XX AC
XX ABH15749;
XX DT 22-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 215726 for detecting SNP TSC00052470.
XX SNF; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 215726; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX CC
SQ Sequence 13 BP; 8 A; 1 C; 0 G; 4 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 940 TTCAATGGTTTAA 952
DB 13 TTAATGTTTAA 1
RESULT 1023

H43383/c
ABH43383 standard; DNA; 13 BP.
ABH43383;
22-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 243360 for detecting SNP TSC0059367.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 243360; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 7 A; 2 C; 1 G; 3 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
940 TTCATGCGTTAA 952
13 TTTATCGGTTAA 1
SULT 1024
H43549
ABH43549 standard; DNA; 13 BP.
ABH43549;
22-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 243526 for detecting SNP TSC0059413.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

OS Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
XX Claim 1; SEQ ID NO 243526; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 1 A; 6 C; 0 G; 6 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 927 TTTATCCCTCTTC 939
Db 1 TCTATCCCTCTTC 13
RESULT 1025
ABH56040
ID ABH56040 standard; DNA; 13 BP.
XX AC ABH56040;
XX 22-FEB-2002 (first entry)
XX Oligonucleotide SEQ ID NO 256017 for detecting SNP TSC0062378.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX

```

XX WPI; 2001-657177/75.
XX
XX
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX
XX
XX Claim 1; SEQ ID NO 256017; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 943 ATTGGTTAATGT 955
XX
XX Do 1 ATTGGTTAATGT 13
XX
XX RESULT 1026
XX ABC17628
XX ID ABC17628 standard; DNA; 13 BP.
XX
XX AC ABC17628;
XX
XX 20-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 17635 for detecting SNP TSC0003780.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX
XX Claim 1; SEQ ID NO 17635; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a

```

```

XX range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 2 A; 0 C; 2 G; 9 T; 0 U; 0 Other;
XX
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 940 TTCATTGGTTAA 952
XX
XX Db 1 TTCATTGGTTAA 13
XX
XX RESULT 1027
XX ABC52233
XX ID ABC52233 standard; DNA; 13 BP.
XX
XX AC ABC52233;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 52250 for detecting SNP TSC0014524.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX
XX Claim 1; SEQ ID NO 52250; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 0 A; 5 C; 0 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;

```

```

Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
      926 TTTATCCCTCCT 938
      ||||| |||||
      1 TTTTCTCTCTCT 13

>SULT 1028
>C53413/c
> ABC53413 standard; DNA; 13 BP.
>
> ABC53413;
>
> 21-FEB-2002 (first entry)
>
> Oligonucleotide SEQ ID NO 53430 for detecting SNP TSC0014750.
>
> SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
> peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
> central nervous system; gastrointestinal; respiratory; immune; metabolic.
>
> Homo sapiens.
>
> WO200177384-A2.
>
> 18-OCT-2001.
>
> 06-APR-2001; 2001WO-IB000713.
>
> 07-APR-2000; 2000DE-01019173.
>
> (EPIG-) EPIGENOMICS AG.
>
> Olek A, Piepenbrock C, Berlin K;
>
> WPI; 2001-657177/75.
>
> Set of oligonucleotides, useful for diagnosis and cell typing, is
> designed to detect single-nucleotide polymorphisms and cytosine
> methylation status.
>
> Claim 1; SEQ ID NO 53430; 29pp + Sequence Listing; German.
>
> This invention describes novel oligonucleotide primers or peptide nucleic
> acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
> and cytosine methylation status in chemically pretreated genomic DNA. The
> oligonucleotides are used for diagnosis and/or prognosis of cancer and a
> range of diseases including immune system, gastrointestinal, respiratory,
> central nervous system, cardiovascular and metabolic disorders. The
> oligomers are also used for detecting cell type differentiation. ABC00010
> -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
> represent the oligomers described in the invention. NOTE: The sequence
> data for this patent did not form part of the printed specification, but
> was obtained in electronic format from WIPO at
> ftp.wipo.int/pub/published_pct_sequences
>
> Sequence 13 BP; 6 A; 2 C; 0 G; 5 T; 0 U; 0 Other;
>
> Query Match 13.4%; Score 9.8; DB 1; Length 13;
> Best Local Similarity 84.6%; Pred. No. 1.1e+03;
> Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
>
> 940 TTCATGCTTAA 952
> ||||| |||||
> 13 TTAATGTTTAA 1

>SULT 1029
>F06602/c
> ABF06602 standard; DNA; 13 BP.
>
> ABF06602;

```

```

DT 21-FEB-2002 (first entry)
XX
DE
XX
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
DR Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
PT Claim 1; SEQ ID NO 106599; 29pp + Sequence Listing; German.
XX
PS This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 6 A; 0 C; 4 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 953 TGTATCGCTACCA 965
XX
DB 13 TTTATCTCTACCA 1
XX
XX
RESULT 1030
ABF06603
ID ABF06603 standard; DNA; 13 BP.
XX
XX AC ABF06603;
XX
XX DT 21-FEB-2002 (first entry)
XX
XX DE Oligonucleotide SEQ ID NO 106600 for detecting SNP TSC0026700.
XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX OS Homo sapiens.
XX
XX PN WO200177384-A2.
XX
XX PD 18-OCT-2001.

```


XX 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 106600; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 3 A; 4 C; 0 G; 6 T; 0 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 953 TGTATCGCTACCA 965
 DB 1 TTATCTCTACCA 13
 RESULT 1031
 ABC07407
 ID ABC07407 standard; DNA; 13 BP.
 AC ABC07407;
 XX 20-FEB-2002 (first entry)
 XX Oligonucleotide SEQ ID NO 7398 for detecting SNP TSC0002151.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 XX WO200177384-A2.
 XX 18-OCT-2001.
 XX 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.

PT methylation status.
 XX Claim 1; SEQ ID NO 7398; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 2 A; 7 C; 0 G; 4 T; 0 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 931 TCCCTCCTCTCTCA 943
 DB 1 TCCCTCATCTCTCA 13
 RESULT 1032
 ABF08305/c
 ID ABF08305 standard; DNA; 13 BP.
 AC ABF08305;
 XX 21-FEB-2002 (first entry)
 XX Oligonucleotide SEQ ID NO 108302 for detecting SNP TSC0027114.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 XX WO200177384-A2.
 XX 18-OCT-2001.
 XX 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 108302; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence

data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 8 A; 1 C; 1 G; 3 T; 0 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

941 TCATTGGTTTAAAT 953
 (|||||)
 13 TTATTCGTTTAAAT 1

SULT 1033

C84497
 ABC84497 standard; DNA; 13 BP.

ABC84497;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 84514 for detecting SNP TSC0021261.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 84514; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 3 A; 2 C; 1 G; 7 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

941 TCATTGGTTTAAAT 953
 (|||||)
 1 TCATCGTTTAAAT 13

RESULT 1034

ABF33699/c
 ID ABF33699 standard; DNA; 13 BP.

XX AC ABF33699;

XX DT 21-FEB-2002 (first entry)

XX DE Oligonucleotide SEQ ID NO 133696 for detecting SNP TSC0033329.

XX SN; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX OS Homo sapiens.

XX PN WO200177384-A2.

XX PD 18-OCT-2001.

XX PF 06-APR-2001; 2001WO-IB000713.

XX PR 07-APR-2000; 2000DE-01019173.

XX PA (EPIG-) EPIGENOMICS AG.

XX PI Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

XX PS Claim 1; SEQ ID NO 133696; 29pp + Sequence Listing; German.

XX CC This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 13 BP; 4 A; 3 C; 1 G; 5 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 947 GTTTAATGTAATCG 959

DB 13 GTTAAATGAATCG 1

RESULT 1035

ABF53570
 ID ABF53570 standard; DNA; 13 BP.

XX AC ABF53570;

XX DT 21-FEB-2002 (first entry)

XX DE Oligonucleotide SEQ ID NO 153567 for detecting SNP TSC0038820.

XX SN; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 10 A; 2 C; 0 G; 1 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
909 TTTCTTTGGTCTT 921
13 TTTATTGGTTT 1

RESULT 1038

ABF82323/c
ABF82323 standard; DNA; 13 BP.

ABF82323;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 182320 for detecting SNP TSC0045058.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB0000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 182320; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 940 TTCATTGGTTTAA 952
DB 13 TTTATTGGTTTAA 1

RESULT 1039

ABH32577
ID ABH32577 standard; DNA; 13 BP.

AC ABH32577;

DT 22-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 232554 for detecting SNP TSC0056713.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

OS Homo sapiens.

PN WO200177384-A2.

PD 18-OCT-2001.

PF 06-APR-2001; 2001WO-IB0000713.

PR 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

PI Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 232554; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 1 A; 6 C; 0 G; 6 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 924 CCTTTTATCCCTC 936

DB 1 CCATTTTCCCTC 13

RESULT 1040

ABH34642/c
ID ABH34642 standard; DNA; 13 BP.

```

XX ABH34642;
AC
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 234619 for detecting SNP TSC0057256.
XX
XX SNP: single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 234619; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 8 A; 0 C; 3 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 918 TCATTGCTTTTA 930
XX ||| |||||
XX 13 TCATTGCTTTTA 1
XX
XX RESULT 1041
XX ABH10418
XX ID ABH10418 standard; DNA; 13 BP.
XX
XX ABH10418;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 210395 for detecting SNP TSC0051377.
XX
XX SNP: single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX

```

```

PN WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 210395; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 5 A; 0 C; 1 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX 941 TCATTGCTTTTAAT 953
XX ||| |||||
XX 1 TAATTAGTTTAAT 13
XX
XX RESULT 1042
XX ABH11688/c
XX ID ABH11688 standard; DNA; 13 BP.
XX
XX ABH11688;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 211665 for detecting SNP TSC0051615.
XX
XX SNP: single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX

```

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 211665; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 6 A; 0 C; 7 G; 0 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
922 TGCCCTTTTATCCC 934
13 TCCCTTTTCTCCC 1

RESULT 1043

ABH1689
ABH1689 standard; DNA; 13 BP.

ABH1689;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 211666 for detecting SNP TSC0051615.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB0000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 211666; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The

CC oligomers are also used for detecting cell type differentiation. ABC00010-ABF9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 0 A; 7 C; 0 G; 6 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 922 TGCCCTTTTATCCC 934

Db 1 TCCCTTTTCTCCC 13

RESULT 1044

ABF87622

ID ABF87622 standard; DNA; 13 BP.

AC ABF87622;

XX 22-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 187619 for detecting SNP TSC0007370.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

OS Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB0000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

XX Claim 1; SEQ ID NO 187619; 29pp + Sequence Listing; German.

CC This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 3 A; 1 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;

Best Local Similarity 84.6%; Pred. No. 1.1e+03;

Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 940 TTGATTCGTTTAA 952
 Db 1 TTGATTCGTTTAA 13

RESULT 1045
 ABF91290/c
 ID ABF91290 standard; DNA; 13 BP.
 AC
 AC ABF91290;
 XX
 XX 22-FEB-2002 (first entry)
 XX
 XX
 XX
 XX Oligonucleotide SEQ ID NO 191287 for detecting SNP TSC0047057.
 XX
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 XX Homo sapiens.
 OS
 XX WO200177384-A2.
 PN
 XX 18-OCT-2001.
 PD
 XX
 XX 06-APR-2001; 2001WO-IB000713.
 PF
 XX 07-APR-2000; 2000DE-01019173.
 PR
 XX (EPIG-) EPIGENOMICS AG.
 PA
 XX Olek A, Piepenbrock C, Berlin K;
 PI
 XX WPI; 2001-657177/75.
 DR
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 XX designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 PT
 XX Claim 1; SEQ ID NO 191287; 29pp + Sequence Listing; German.
 PS
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 XX Sequence 13 BP; 8 A; 0 C; 4 G; 1 T; 0 U; 0 Other;
 SQ
 Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 922 TGCTTTTATCCC 934
 Db 13 TTCCTTTTATCCC 1

RESULT 1046
 ABH45584/c
 ID ABH45584 standard; DNA; 13 BP.
 AC
 AC ABH45584;
 XX
 XX 22-FEB-2002 (first entry)
 XX
 XX
 XX
 XX Oligonucleotide SEQ ID NO 264161 for detecting SNP TSC0064009.
 XX
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 XX Homo sapiens.
 OS
 XX WO200177384-A2.
 PN
 XX 18-OCT-2001.
 PD
 XX
 XX 06-APR-2001; 2001WO-IB000713.
 PF

DE Oligonucleotide SEQ ID NO 245561 for detecting SNP TSC0059959.
 XX
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 XX Homo sapiens.
 OS
 XX WO200177384-A2.
 PN
 XX 18-OCT-2001.
 PD
 XX
 XX 06-APR-2001; 2001WO-IB000713.
 PF
 XX 07-APR-2000; 2000DE-01019173.
 PR
 XX (EPIG-) EPIGENOMICS AG.
 PA
 XX Olek A, Piepenbrock C, Berlin K;
 PI
 XX WPI; 2001-657177/75.
 DR
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 XX designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 PT
 XX Claim 1; SEQ ID NO 245561; 29pp + Sequence Listing; German.
 PS
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 XX Sequence 13 BP; 5 A; 0 C; 5 G; 3 T; 0 U; 0 Other;
 SQ
 Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 933 CCTCCTCTTCATT 945
 Db 13 CCTACTCTACATT 1

RESULT 1047
 ABH64184
 ID ABH64184 standard; DNA; 13 BP.
 XX
 AC ABH64184;
 XX
 XX 22-FEB-2002 (first entry)
 XX
 XX
 XX
 XX Oligonucleotide SEQ ID NO 264161 for detecting SNP TSC0064009.
 XX
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 XX Homo sapiens.
 OS
 XX WO200177384-A2.
 PN
 XX 18-OCT-2001.
 PD
 XX
 XX 06-APR-2001; 2001WO-IB000713.
 PF

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 264161; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 3 A; 0 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

940 TTCATTGGTTTAA 952

1 TTGATTGGTTGTA 13

SU1T 1048

C69698/c
ABC69698 standard; DNA; 13 BP.

ABC69698;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 69715 for detecting SNP TSC0018143.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

PS Claim 1; SEQ ID NO 69715; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 7 A; 0 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 927 TTTATCCCTCCTC 939

13 TTTCTTCCTCCTC 1

RESULT 1049

ABC20174/c
ID ABC20174 standard; DNA; 13 BP.

XX

AC ABC20174;

DT 20-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 20191 for detecting SNP TSC0004139.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

PS Claim 1; SEQ ID NO 20191; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at


```
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 7 A; 0 C; 2 G; 4 T; 0 U; 0 Other;
    Query Match      13.4%; Score 9.8; DB 1; Length 13;
    Best Local Similarity 84.6%; Pred. No. 1.1e+03;
    Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 941 TCATTGGTTTAAT 953
Db 13 TCATTCAATTAAT 1
||||| |||||

RESULT 1050
ABC25844
ID ABC25844 standard; DNA; 13 BP.
XX
AC ABC25844;
XX
DT 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 25861 for detecting SNP TSC0006595.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 25861; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 4 A; 0 C; 1 G; 8 T; 0 U; 0 Other;
    Query Match      13.4%; Score 9.8; DB 1; Length 13;
    Best Local Similarity 84.6%; Pred. No. 1.1e+03;
    Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 940 TTCATTGGTTTAA 952
Db 1 TTTATTAGTTTAA 13
||||| |||||

RESULT 1051
ABC80733/c
ID ABC80739 standard; DNA; 13 BP.
XX
AC ABC80739;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 80756 for detecting SNP TSC0020458.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 80756; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 8 A; 3 C; 1 G; 1 T; 0 U; 0 Other;
    Query Match      13.4%; Score 9.8; DB 1; Length 13;
    Best Local Similarity 84.6%; Pred. No. 1.1e+03;
    Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 947 GTTTAATGTTTCG 959
Db 13 GTTTATTGTTTCG 1
||||| |||||

RESULT 1052
ABC33272
ID ABC33272 standard; DNA; 13 BP.
XX
AC ABC33272;
XX
DT 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 33289 for detecting SNP TSC0010604.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
```


CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 CC
 SQ Sequence 13 BP; 4 A; 1 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 953 TGATTCGCTACCA 965
 DB 13 TTAAACGCTACCA 1

RESULT 1055
 ABF39997/C
 ID ABF39997 standard; DNA; 13 BP.

XX AC ABF39997;

XX DT 21-FEB-2002 (first entry)

XX DE Oligonucleotide SEQ ID NO 139994 for detecting SNP TSC0035065.

XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX OS Homo sapiens.

XX FN WO200177384-A2.

XX PD 18-OCT-2001.

XX PF 06-APR-2001; 2001WO-IB000713.

XX PR 07-APR-2000; 2000DE-01019173.

XX XX (EPIG-) EPIGENOMICS AG.

XX FI Olek A, Piepenbrock C, Berlin K;

XX DR WPI; 2001-657177/75.

XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.

XX PS Claim 1; SEQ ID NO 139994; 29pp + Sequence Listing; German.

XX CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 CC

SQ Sequence 13 BP; 8 A; 2 C; 0 G; 3 T; 0 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 13;

Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 941 TCATTGCTTTAAT 953
 DB 13 TGATTGCTTTAAT 1

RESULT 1056

ABF39998
 ID ABF39998 standard; DNA; 13 BP.

XX AC ABF39998;

XX DT 21-FEB-2002 (first entry)

XX DE Oligonucleotide SEQ ID NO 139995 for detecting SNP TSC0035065.

XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX OS Homo sapiens.

XX FN WO200177384-A2.

XX PD 18-OCT-2001.

XX PF 06-APR-2001; 2001WO-IB000713.

XX PR 07-APR-2000; 2000DE-01019173.

XX PA (EPIG-) EPIGENOMICS AG.

XX FI Olek A, Piepenbrock C, Berlin K;

XX DR WPI; 2001-657177/75.

XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.

XX PS Claim 1; SEQ ID NO 139995; 29pp + Sequence Listing; German.

XX CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 CC

SQ Sequence 13 BP; 3 A; 1 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 941 TCATTGCTTTAAT 953
 DB 1 TGATTGCTTTAAT 13

RESULT 1057

ABF93487
 ID ABF93487 standard; DNA; 13 BP.

XX AC ABF93487;

```

22-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 193484 for detecting SNP TSC0047598.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 193484; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABT00010-ABT82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 1 A; 5 C; 1 G; 6 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
931 TCCTCTCTCTTCA 943
|||||
1 TCCTCTCTCTTCA 13
RESULT 1058
H21461
ABH21461 standard; DNA; 13 BP.
ABH21461;
22-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 221438 for detecting SNP TSC0053890.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 221438; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABT00010-ABT82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 1 A; 5 C; 1 G; 6 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
931 TCCTCTCTCTTCA 943
|||||
1 TCCTCTCTCTTCA 13

```

```

PD 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 221438; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABT00010-ABT82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 3 A; 6 C; 0 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 931 TCCTCTCTCTTCA 943
XX |||||
XX 1 TCCTCTCTTAAUCA 13
XX DB
XX
XX RESULT 1059
XX ABH28587/c
XX ID ABH28587 standard; DNA; 13 BP.
XX
XX AC ABH28587;
XX
XX DT 22-FEB-2002 (first entry)
XX
XX DE Oligonucleotide SEQ ID NO 228564 for detecting SNP TSC0009481.
XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX OS Homo sapiens.
XX
XX PN WO200177384-A2.
XX
XX PD 18-OCT-2001.
XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX
XX PR 07-APR-2000; 2000DE-01019173.
XX
XX PA (EPIG-) EPIGENOMICS AG.
XX
XX PI Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX
XX

```



```

)      13 CCTTTCAATTC 1
RESULT 1062
) ABH37736 standard; DNA; 13 BP.
) ABH37736;
) 22-FEB-2002 (first entry)
) Oligonucleotide SEQ ID NO 237713 for detecting SNP TSC0057979.
) SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
) peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
) central nervous system; gastrointestinal; respiratory; immune; metabolic.
) Homo sapiens.
) WO200177384-A2.
) 18-OCT-2001.
) 06-APR-2001; 2001WO-IB000713.
) 07-APR-2000; 2000DE-01019173.
) (EPIG-) EPIGENOMICS AG.
) Olek A, Piepenbrock C, Berlin K;
) WPI; 2001-657177/75.
) Set of oligonucleotides, useful for diagnosis and cell typing, is
) designed to detect single-nucleotide polymorphisms and cytosine
) methylation status.
) Claim 1; SEQ ID NO 237713; 29pp + Sequence Listing; German.
) This invention describes novel oligonucleotide primers or peptide nucleic
) acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
) and cytosine methylation status in chemically pretreated genomic DNA. The
) oligonucleotides are used for diagnosis and/or prognosis of cancer and a
) range of diseases including immune system, gastrointestinal, respiratory,
) central nervous system, cardiovascular and metabolic disorders. The
) oligomers are also used for detecting cell type differentiation. ABC00010
) -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
) represent the oligomers described in the invention. NOTE: The sequence
) data for this patent did not form part of the printed specification, but
) was obtained in electronic format from WIPO at
) ftp.wipo.int/pub/published_pct_sequences
) Sequence 13 BP; 2 A; 0 C; 3 G; 8 T; 0 U; 0 Other;
)
) Query Match 13.4%; Score 9.8; DB 1; Length 13;
) Best Local Similarity 84.6%; Pred. No. 1.1e+03;
) Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
)
) /      947 GTTTAATGTCG 959
)      |||||
)      1 GTTTAATGTTTG 13
)
) 35ULT 1063
) 3H43993/C
) ABH43993 standard; DNA; 13 BP.
) ABH43993;
) 22-FEB-2002 (first entry)
) Oligonucleotide SEQ ID NO 243970 for detecting SNP TSC0059515.
)
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 243970; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX Sequence 13 BP; 8 A; 2 C; 0 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 945 TCGTTTAATGTCAT 957
XX |||||
XX Db 13 TGATTATTGTAT 1
XX
XX RESULT 1064
XX ABH46421
XX ID ABH46421 standard; DNA; 13 BP.
XX
XX AC ABH46421;
XX
XX XX 22-FEB-2002 (first entry)
XX
XX DE Oligonucleotide SEQ ID NO 246398 for detecting SNP TSC0060214.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX
```

```

XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 246398; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 4 A; 2 C; 0 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 950 TAATGTATCGCTA 962
XX
XX Db 1 TAATTTATCTCTA 13
XX
XX RESULT 1065
XX ABH58472/C
XX ID ABH58472 standard; DNA; 13 BP.
XX
XX AC ABH58472;
XX
XX XX 22-FEB-2002 (first entry)
XX
XX DE Oligonucleotide SEQ ID NO 258449 for detecting SNP TSC0062845.
XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX CS Homo sapiens.
XX
XX XX WO200177384-A2.
XX
XX XX 18-OCT-2001.
XX
XX XX 06-APR-2001; 2001WO-IB0000713.
XX
XX XX 07-APR-2000; 2000DE-01019173.
XX
XX XX (EPIG-) EPIGENOMICS AG.
XX
XX FI Olek A, Piepenbrock C, Berlin K;
XX
XX DR WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 258449; 29pp + Sequence Listing; German.
XX

```

```

CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 8 A; 0 C; 2 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 919 CTTTGCCTTTTAT 931
XX
XX Db 13 CTTTAACCTTTTAT 1
XX
XX RESULT 1066
XX ABC18720
XX ID ABC18720 standard; DNA; 13 BP.
XX
XX XX ABC18720;
XX
XX XX 20-FEB-2002 (first entry)
XX
XX DE Oligonucleotide SEQ ID NO 18727 for detecting SNP TSC0003943.
XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX OS Homo sapiens.
XX
XX XX WO200177384-A2.
XX
XX XX 18-OCT-2001.
XX
XX XX 06-APR-2001; 2001WO-IB0000713.
XX
XX XX 07-APR-2000; 2000DE-01019173.
XX
XX XX (EPIG-) EPIGENOMICS AG.
XX
XX FI Olek A, Piepenbrock C, Berlin K;
XX
XX XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 18727; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX

```

```
! Sequence 13 BP; 1 A; 0 C; 2 G; 10 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

/ 909 TTTCTTTGGTCTT 921
| | | | | | | |
| 1 TTTTITGGTATT 13

3SULT 1067
3C91122
) ABC99122 standard; DNA; 13 BP.
(
) ABC99122;
(
) 21-FEB-2002 (first entry)
(
) Oligonucleotide SEQ ID NO 99139 for detecting SNP TSC0024618.
(
) SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
(
) peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
(
) central nervous system; gastrointestinal; respiratory; immune; metabolic.
(
) Homo sapiens.
(
) WO200177384-A2.
(
) 18-OCT-2001.
(
) 06-APR-2001; 2001WO-IB000713.
(
) 07-APR-2000; 2000DE-01019173.
(
) (EPTG-) EPIGENOMICS AG.
(
) Olek A, Piepenbrock C, Berlin K;
(
) WPI; 2001-657177/75.
(
) Set of oligonucleotides, useful for diagnosis and cell typing, is
(
) designed to detect single-nucleotide polymorphisms and cytosine
(
) methylation status.
(
) Claim 1; SEQ ID NO 99139; 29pp + Sequence Listing; German.
(
) This invention describes novel oligonucleotide primers or peptide nucleic
(
) acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
(
) and cytosine methylation status in chemically pretreated genomic DNA. The
(
) oligonucleotides are used for diagnosis and/or prognosis of cancer and a
(
) range of diseases including immune system, gastrointestinal, respiratory,
(
) central nervous system, cardiovascular and metabolic disorders. The
(
) oligomers are also used for detecting cell type differentiation. ABC00010
(
) -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
(
) represent the oligomers described in the invention. NOTE: The sequence
(
) data for this patent did not form part of the printed specification, but
(
) was obtained in electronic format from WIPO at
(
) ftp.wipo.int/pub/published_pct_sequences
(
)
(
) Sequence 13 BP; 1 A; 0 C; 2 G; 10 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

/ 902 TGGTCATTCTT 914
| | | | | | | |
| 1 TGGTTATTTT 13

3SULT 1068
3C02478
) ABC02478 standard; DNA; 13 BP.
(
) ABC02478;
(
) 20-FEB-2002 (first entry)
(
) Oligonucleotide SEQ ID NO 2469 for detecting SNP TSC0000994.
(
) SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
(
) peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
(
) central nervous system; gastrointestinal; respiratory; immune; metabolic.
(
) Homo sapiens.
(
) WO200177384-A2.
(
) 18-OCT-2001.
(
) 06-APR-2001; 2001WO-IB000713.
(
) 07-APR-2000; 2000DE-01019173.
(
) (EPTG-) EPIGENOMICS AG.
(
) Olek A, Piepenbrock C, Berlin K;
(
) WPI; 2001-657177/75.
(
) Set of oligonucleotides, useful for diagnosis and cell typing, is
(
) designed to detect single-nucleotide polymorphisms and cytosine
(
) methylation status.
(
) Claim 1; SEQ ID NO 2469; 29pp + Sequence Listing; German.
(
) This invention describes novel oligonucleotide primers or peptide nucleic
(
) acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
(
) and cytosine methylation status in chemically pretreated genomic DNA. The
(
) oligonucleotides are used for diagnosis and/or prognosis of cancer and a
(
) range of diseases including immune system, gastrointestinal, respiratory,
(
) central nervous system, cardiovascular and metabolic disorders. The
(
) oligomers are also used for detecting cell type differentiation. ABC00010
(
) -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
(
) represent the oligomers described in the invention. NOTE: The sequence
(
) data for this patent did not form part of the printed specification, but
(
) was obtained in electronic format from WIPO at
(
) ftp.wipo.int/pub/published_pct_sequences
(
)
(
) Sequence 13 BP; 5 A; 0 C; 3 G; 5 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 943 ATGGTTTAAATGT 955
| | | | | | | |
| 1 ATAGGTATAATGT 13

Db
RESULT 1069
ABC80738
ID ABC80738 standard; DNA; 13 BP.
XX
AC ABC80738;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 80755 for detecting SNP TSC0020458.
XX
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
```


central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 3 A; 0 C; 9 G; 1 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

931 TCCCTCTCTCTCA 943
|||||
13 TCCCTCTCTCTCA 1

RESULT 1072

ABC35595/c
ABC35595 standard; DNA; 13 BP.

ABC35595;

20-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 35612 for detecting SNP TSC0011256.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 35612; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 7 A; 4 C; 0 G; 2 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 944 TTGGTTTAATGTA 956
|||||
Db 13 TTGGTTGATTGTA 1

RESULT 1073

ABC63986/c
ID ABC63986 standard; DNA; 13 BP.

XX ABC63986;

XX 21-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 64003 for detecting SNP TSC0016893.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 64003; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 5 A; 0 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 932 CCCTCTCTCTCAT 944
|||||
Db 13 CCCTCTCTCAT 1

RESULT 1074

ABF33698
ID ABF33698 standard; DNA; 13 BP.

XX ABF33698;

XX 21-FEB-2002 (first entry)

```

XX DE Oligonucleotide SEQ ID NO 133695 for detecting SNP TSC0033329.
XX XX
XX SN; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX XX
XX CS Homo sapiens.
XX XX
XX EN WO200177384-A2.
XX XX
XX FD 18-OCT-2001.
XX XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX XX
XX FR 07-APR-2000; 2000DE-01019173.
XX XX
XX FA (EPIG-) EPIGENOMICS AG.
XX XX
XX PI Olek A, Piepenbrock C, Berlin K;
XX XX
XX DR WPI; 2001-657177/75.
XX XX
XX FT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX FT methylation status.
XX XX
XX PS Claim 1; SEQ ID NO 133695; 29pp + Sequence Listing; German.
XX XX
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX XX
XX SQ Sequence 13 BP; 5 A; 1 C; 3 G; 4 T; 0 U; 0 Other;
XX XX
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX XX
XX QY 947 GTTAAATGATCG 959
XX DB ||| |||| ||||
XX 1 GTTAAATGATCG 13
XX XX
XX RESULT 1075
XX ABF39999/c
XX ID ABF39999 standard; DNA; 13 BP.
XX AC ABF39999;
XX XX
XX DT 21-FEB-2002 (first entry)
XX XX
XX DE Oligonucleotide SEQ ID NO 139996 for detecting SNP TSC0035065.
XX XX
XX KW SN; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX XX
XX OS Homo sapiens.
XX XX
XX EN WO200177384-A2.
XX XX
XX FD 18-OCT-2001.
XX XX
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.

```

```

PF 06-APR-2001; 2001WO-IB000713.
XX XX
PR 07-APR-2000; 2000DE-01019173.
XX XX
PA (EPIG-) EPIGENOMICS AG.
XX XX
PI Olek A, Piepenbrock C, Berlin K;
XX XX
XX WPI; 2001-657177/75.
XX XX
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX XX
XX PS Claim 1; SEQ ID NO 139996; 29pp + Sequence Listing; German.
XX XX
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX XX
XX SQ Sequence 13 BP; 7 A; 2 C; 1 G; 3 T; 0 U; 0 Other;
XX XX
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX XX
XX QY 941 TCATTGCTTTAAT 953
XX DB ||| |||| ||||
XX 13 TGATTCGTTTAAT 1
XX XX
XX RESULT 1076
XX ABF97571/c
XX ID ABF97571 standard; DNA; 13 BP.
XX AC ABF97571;
XX XX
XX DT 22-FEB-2002 (first entry)
XX XX
XX DE Oligonucleotide SEQ ID NO 197568 for detecting SNP TSC0048621.
XX XX
XX KW SN; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX XX
XX OS Homo sapiens.
XX XX
XX EN WO200177384-A2.
XX XX
XX PD 18-OCT-2001.
XX XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX XX
XX PR 07-APR-2000; 2000DE-01019173.
XX XX
XX PA (EPIG-) EPIGENOMICS AG.
XX XX
XX PI Olek A, Piepenbrock C, Berlin K;
XX XX
XX WPI; 2001-657177/75.
XX XX
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.

```

Claim 1; SEQ ID NO 197568; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 9 A; 1 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

945 TGGTTTAATGTAAT 957

|||||
13 TGGTTTAATGTAAT 1

RESULT 1077

ABF99128

ABF99128 standard; DNA; 13 BP.

ABF99128;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 199125 for detecting SNP TSC0049008.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 199125; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but

CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

SQ Sequence 13 BP; 1 A; 0 C; 3 G; 9 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 905 TCATTTTCTTTGG 917

|||||
Db 1 TCATTTTCTTTGG 13

RESULT 1078

ABH00288

ID ABH00288 standard; DNA; 13 BP.

XX AC ABH00288;

DT 22-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 200265 for detecting SNP TSC0049282.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 200265; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

SQ Sequence 13 BP; 3 A; 0 C; 1 G; 9 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 944 TTGGTTTAATGTA 956

|||||
Db 1 TTGGTTTAATGTA 13

```
RESULT 1079
ABF78482
ID ABF78482 standard; DNA; 13 BP.
XX
XX
AC ABF78482;
XX
XX 22-FEB-2002 (first entry)
XX
XX
DE Oligonucleotide SEQ ID NO 178479 for detecting SNP TSC0044196.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 178479; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 2 A; 0 C; 2 G; 9 T; 0 U; 0 Other;
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 945 TCGTTTATGTAT 957
XX
XX DB 1 TTGTTTATGTAT 13
XX
XX RESULT 1080
ABH07556
ID ABH07556 standard; DNA; 13 BP.
XX
XX
AC ABH07556;
XX
XX 22-FEB-2002 (first entry)
XX
XX
DE Oligonucleotide SEQ ID NO 207533 for detecting SNP TSC0004679.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
```

```
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 207533; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 2 A; 0 C; 3 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 944 TTGTTTATGTAT 956
XX
XX DB 1 TTGTTTATGTAT 13
XX
XX RESULT 1081
ABF58739
ID ABF58739 standard; DNA; 13 BP.
XX
XX
AC ABF58739;
XX
XX 21-FEB-2002 (first entry)
XX
XX
DE Oligonucleotide SEQ ID NO 158736 for detecting SNP TSC0039945.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
```



```
Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

CY 901 CTGTCATTCTCT 913
   ||| |||||
Db 1 CTCGCCATTCTCT 13

RESULT 1084
ABF04676
ID ABF04676 standard; DNA; 13 BP.
XX
AC ABF04676;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 104673 for detecting SNP TSC0026175.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 104673; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 1 A; 0 C; 3 G; 9 T; 0 U; 0 Other;

Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

CY 911 TCTTTGTCCTTG 923
   ||| |||||
Db 1 TATTTCGTTTAT 13

RESULT 1085
ABF08304
ID ABF08304 standard; DNA; 13 BP.
XX
```

```
AC ABF08304;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 108301 for detecting SNP TSC0027114.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 108301; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 3 A; 1 C; 1 G; 8 T; 0 U; 0 Other;

Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

CY 941 TCATTGCTTAAAT 953
   ||| |||||
Db 1 TTATTCGTTTAAAT 13

RESULT 1086
ABC84049/c
ID ABC84049 standard; DNA; 13 BP.
XX
AC ABC84049;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 84066 for detecting SNP TSC0021145.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
```

18-OCT-2001.
06-APR-2001; 2001WO-IB0000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 84066; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 10 A; 3 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
909 TTTCTTTGGTCTT 921
13 TTGTGTGGTTT 1
RESULT 1087
3C35594
ABC35594 standard; DNA; 13 BP.
ABC35594;
20-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 35611 for detecting SNP TSC0011256.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB0000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.

PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 35611; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 2 A; 0 C; 4 G; 7 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
944 TTGGTTTATGTA 956
1 TTGGTTGATTGTA 13
Db
RESULT 1088
ABC14809/c
ID ABC14809 standard; DNA; 13 BP.
AC ABC14809;
XX
XX 20-FEB-2002 (first entry)
XX Oligonucleotide SEQ ID NO 14816 for detecting SNP TSC0003331.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB0000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 14816; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.

Claim 1; SEQ ID NO 91495; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 2 A; 0 C; 2 G; 9 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

903 GGTCAATTTCTTT 915

1 GGTAATTTTCTTT 13

SULT 1092

F19925

ABF19925 standard; DNA; 13 BP.

ABF19925;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 119922 for detecting SNP TSC0029932.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.

Claim 1; SEQ ID NO 119922; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 0 A; 5 C; 0 G; 8 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 927 TTTATCCCTCTC 939

1 TTTTCTCTCTC 13

RESULT 1093

ABF33000/c

ID ABF33000 standard; DNA; 13 BP.

ABF33000;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 132997 for detecting SNP TSC0033182.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.

Claim 1; SEQ ID NO 132997; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX

SQ Sequence 13 BP; 5 A; 0 C; 5 G; 3 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 931 TCCCTCCTCTTCA 943
D5 13 TCCCTCATATTC A 1
|||||

RESULT 1094
ABF34215
ID ABF34215 standard; DNA; 13 BP.
XX AC
XX ABF34215;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 134212 for detecting SNP TSC0033456.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 134212; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX

XX SQ Sequence 13 BP; 2 A; 3 C; 0 G; 8 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 921 TTGGCTTTTATCC 933
D5 1 TTATCTTTTATCC 13
|||||

RESULT 1095
ABF40195
ID ABF40195 standard; DNA; 13 BP.
XX AC
XX ABF40195;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 140192 for detecting SNP TSC0035122.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 140192; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX

SQ Sequence 13 BP; 1 A; 2 C; 0 G; 10 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 919 CTTTGCTTTTAT 931
D5 1 CTTTTCCTTTAT 13
|||||

RESULT 1096

```

F44005/C
ABF44005 standard; DNA; 13 BP.
ABF44005;
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 144002 for detecting SNP TSC0036164.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 144002; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligomers are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 10 A; 3 C; 0 G; 0 T; 0 U; 0 Other;
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligomers are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 10 A; 3 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
908 TTTCTTTTGGTCT 920
|||||
13 TTTTCTTTGGTCT 1
RESULT 1097
BF99935/C
ABF99935 standard; DNA; 13 BP.
ABF99935;
22-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 199932 for detecting SNP TSC0049190.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 199932; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligomers are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 6 A; 4 C; 0 G; 3 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
947 GTTAAATGATCG 959
|||||
13 GTTAAATGATAG 1
RESULT 1098
ABF51814
ID ABF51814 standard; DNA; 13 BP.
AC ABF51814;
XX
XX
21-FEB-2002 (first entry)
XX
XX
Oligonucleotide SEQ ID NO 151811 for detecting SNP TSC0038352.
XX
XX
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX
XX
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX
XX
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
OS
XX
WO200177384-A2.
PN
XX
18-OCT-2001.
PD
XX
06-APR-2001; 2001WO-IB000713.
PF
XX
07-APR-2000; 2000DE-01019173.
PR
XX
(EPIG-) EPIGENOMICS AG.
PA
XX
Olek A, Piepenbrock C, Berlin K;
PI

```

```

XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 151811; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 4 A; 0 C; 2 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 940 TTCATTGCTTTAA 952
XX ||||| |||||
XX 1 TTTATTGGATTAA 13
XX
XX RESULT 1099
XX ABF78386
XX ID ABF78386 standard; DNA; 13 BP.
XX AC ABF78386;
XX XX
XX DT 22-FEB-2002 (first entry)
XX
XX DE Oligonucleotide SEQ ID NO 178383 for detecting SNP TSC0009992.
XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX CS Homo sapiens.
XX
XX PV WO200177384-A2.
XX
XX PJ 18-OCT-2001.
XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX
XX PR 07-APR-2000; 2000DE-01019173.
XX
XX PA (EPIG-) EPIGENOMICS AG.
XX
XX PI Olek A, Piepenbrock C, Berlin K;
XX
XX PS WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 178383; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a

```

```

CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 1 A; 1 C; 3 G; 8 T; 0 U; 0 Other;
XX
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 918 TCTTGGCTTTTA 930
XX ||||| |||||
XX 1 TGTTTGCTTTTA 13
XX
XX Db
XX
XX RESULT 1100
XX ABF56005
XX ID ABF56005 standard; DNA; 13 BP.
XX AC ABF56005;
XX XX
XX DT 21-FEB-2002 (first entry)
XX
XX DE Oligonucleotide SEQ ID NO 156002 for detecting SNP TSC0039366.
XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX CS Homo sapiens.
XX
XX PV WO200177384-A2.
XX
XX PJ 18-OCT-2001.
XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX
XX PR 07-APR-2000; 2000DE-01019173.
XX
XX PA (EPIG-) EPIGENOMICS AG.
XX
XX PI Olek A, Piepenbrock C, Berlin K;
XX
XX PS WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 156002; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 2 A; 4 C; 1 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;

```

```

Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
      949 TTAATGTCGCT 961
      ||| ||| ||| |||
      1 TTAATGTCGCT 13

RESULT 1101
ABF57606
  ABF57606 standard; DNA; 13 BP.
  ABF57606;
  21-FEB-2002 (first entry)
  Oligonucleotide SEQ ID NO 157603 for detecting SNP TSC0039698.
  SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
  peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
  central nervous system; gastrointestinal; respiratory; immune; metabolic.
  Homo sapiens.
  WO200177384-A2.
  18-OCT-2001.
  06-APR-2001; 2001WO-IB000713.
  07-APR-2000; 2000DE-01019173.
  (EPIG-) EPIGENOMICS AG.
  Olek A, Piepenbrock C, Berlin K;
  WPI; 2001-657177/75.
  Set of oligonucleotides, useful for diagnosis and cell typing, is
  designed to detect single-nucleotide polymorphisms and cytosine
  methylation status.
  Claim 1; SEQ ID NO 157603; 29pp + Sequence Listing; German.
  This invention describes novel oligonucleotide primers or peptide nucleic
  acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
  and cytosine methylation status in chemically pretreated genomic DNA. The
  oligonucleotides are used for diagnosis and/or prognosis of cancer and a
  range of diseases including immune system, gastrointestinal, respiratory,
  central nervous system, cardiovascular and metabolic disorders. The
  oligomers are also used for detecting cell type differentiation. ABC00010
  -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
  represent the oligomers described in the invention. NOTE: The sequence
  data for this patent did not form part of the printed specification, but
  was obtained in electronic format from WIPO at
  ftp.wipo.int/pub/published_pct_sequences
  Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;
  Query Match 13.4%; Score 9.8; DB 1; Length 13;
  Best Local Similarity 84.6%; Pred. No. 1.1e+03;
  Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

      943 ATTGGTTTAATGT 955
      ||| ||| ||| |||
      1 ATTGGTTTAATTT 13

RESULT 1102
ABH10419/C
  ABH10419 standard; DNA; 13 BP.
  ABH10419;
  22-FEB-2002 (first entry)
  Oligonucleotide SEQ ID NO 211889 for detecting SNP TSC0051655.
  SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
  peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
  central nervous system; gastrointestinal; respiratory; immune; metabolic.
  Homo sapiens.
  WO200177384-A2.
  18-OCT-2001.

```

```

DT 22-FEB-2002 (first entry)
XX Oligonucleotide SEQ ID NO 210396 for detecting SNP TSC0051377.
DE
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 210396; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 7 A; 1 C; 0 G; 5 T; 0 U; 0 Other;
SQ
  Query Match 13.4%; Score 9.8; DB 1; Length 13;
  Best Local Similarity 84.6%; Pred. No. 1.1e+03;
  Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 941 TCATTGGTTTAAT 953
DB 13 TAAATTAGTTAAT 1

RESULT 1103
ABH11912/C
  ID ABH11912 standard; DNA; 13 BP.
  AC ABH11912;
  XX
  XX 22-FEB-2002 (first entry)
  XX Oligonucleotide SEQ ID NO 211889 for detecting SNP TSC0051655.
  XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
  XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
  XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
  XX Homo sapiens.
  XX WO200177384-A2.
  XX 18-OCT-2001.

```

XX PF 06-APR-2001; 2001WO-IB000713.
 XX BR 07-APR-2000; 2000DE-01019173.
 XX PA (EPIG-) EPIGENOMICS AG.
 XX PI Olek A, Piepenbrock C, Berlin K;
 XX DR WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 211889; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX Sequence 13 BP; 9 A; 0 C; 2 G; 2 T; 0 U; 0 Other;
 SQ Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 918 TCTTGGCTTTTA 930
 DQ 13 TATTTCTTTTA 1
 RESULT 1104
 ABH37512
 ID ABH37512 standard; DNA; 13 BP.
 AC ABH37512;
 XX 22-FEB-2002 (first entry)
 DE Oligonucleotide SEQ ID NO 237489 for detecting SNP TSC0057923.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 OS WO200177384-A2.
 PN 18-OCT-2001.
 PD 06-APR-2001; 2001WO-IB000713.
 PF 07-APR-2000; 2000DE-01019173.
 PR (EPIG-) EPIGENOMICS AG.
 PA Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine

PT methylation status.
 XX Claim 1; SEQ ID NO 237489; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX Sequence 13 BP; 5 A; 0 C; 2 G; 6 T; 0 U; 0 Other;
 SQ Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 950 TAAATGATATCGCTA 962
 DQ 1 TAAATGATATGTTA 13
 RESULT 1105
 ABF87620
 ID ABF87620 standard; DNA; 13 BP.
 AC ABF87620;
 XX 22-FEB-2002 (first entry)
 DE Oligonucleotide SEQ ID NO 187617 for detecting SNP TSC0007370.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 OS WO200177384-A2.
 PN 18-OCT-2001.
 PD 06-APR-2001; 2001WO-IB000713.
 PF 07-APR-2000; 2000DE-01019173.
 PR (EPIG-) EPIGENOMICS AG.
 PA Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 187617; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence

data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

940 TTCATTGGTTAA 952

|||||
1 TTCATTGGTTAA 13

RESULT 1106

ABC17546

ABC17546 standard; DNA; 13 BP.

ABC17546;

20-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 17553 for detecting SNP TSC0003772.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB0000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 17553; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 0 A; 1 C; 4 G; 8 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

917 GTCTTTGCCCTTTT 929

|||||
1 GTCTTTGCCCTTTT 13

RESULT 1107

ABC17547/C

ID ABC17547 standard; DNA; 13 BP.

XX ABC17547;

XX AC ABC17547;

DT 20-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 17554 for detecting SNP TSC0003772.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;

central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB0000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 17554; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 8 A; 4 C; 1 G; 0 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 917 GTCTTTGCCCTTTT 929

|||||
13 GTCTTTGCCCTTTT 1

RESULT 1108

ABC44352

ID ABC44352 standard; DNA; 13 BP.

XX ABC44352;

XX AC ABC44352;

DT 21-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 44369 for detecting SNP TSC0013028.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 CS
 XX WO200177384-A2.
 FN 18-OCT-2001.
 XX
 XX PD
 XX PF 06-APR-2001; 2001WO-IB000713.
 XX FR 07-APR-2000; 2000DE-01019173.
 XX
 XX (EPIG-) EPIGENOMICS AG.
 XX PA Olek A, Piepenbrock C, Berlin K;
 XX PI WPI; 2001-657177/75.
 XX DR Set of oligonucleotides, useful for diagnosis and cell typing, is
 XX PT designed to detect single-nucleotide polymorphisms and cytosine
 XX PT methylation status.
 XX FS Claim 1; SEQ ID NO 44369; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 2 A; 0 C; 4 G; 7 T; 0 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 945 TGGTTTAAATGAT 957
 DB 1 TGGTGTATTGTAAT 13
 RESULT 1109
 ABC96140
 ID ABC96140 standard; DNA; 13 BP.
 XX
 AC ABC96140;
 XX
 XX 21-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 96157 for detecting SNP TSC0023904.
 XX
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 OS
 XX WO200177384-A2.
 XX
 XX 18-OCT-2001.
 XX
 XX PD 06-APR-2001; 2001WO-IB000713.
 XX PF 07-APR-2000; 2000DE-01019173.
 XX
 XX This invention describes novel oligonucleotide primers or peptide nucleic

PA (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX DR Set of oligonucleotides, useful for diagnosis and cell typing, is
 XX PT designed to detect single-nucleotide polymorphisms and cytosine
 XX PT methylation status.
 XX FS Claim 1; SEQ ID NO 96157; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 5 A; 0 C; 2 G; 6 T; 0 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 941 TCATGTGTTTAAT 953
 DB 1 TAAATGGTTTAAT 13
 RESULT 1110
 ABC75663
 ID ABC75663 standard; DNA; 13 BP.
 XX
 AC ABC75663;
 XX
 XX 21-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 75680 for detecting SNP TSC0019401.
 XX
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 OS
 XX WO200177384-A2.
 XX
 XX 18-OCT-2001.
 XX
 XX PD 06-APR-2001; 2001WO-IB000713.
 XX PF 07-APR-2000; 2000DE-01019173.
 XX
 XX (EPIG-) EPIGENOMICS AG.
 XX PA Olek A, Piepenbrock C, Berlin K;
 XX PI WPI; 2001-657177/75.
 XX DR Set of oligonucleotides, useful for diagnosis and cell typing, is
 XX PT designed to detect single-nucleotide polymorphisms and cytosine
 XX PT methylation status.
 XX FS Claim 1; SEQ ID NO 75680; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic

acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 2 A; 7 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

931 TCCCTCCTCTTCA 943

1 TCCATCCTCTTCA 13

RESULT 1111

ABC25845/C
ABC25845 standard; DNA; 13 BP.

ABC25845;

20-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 25862 for detecting SNP TSC0006595.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 25862; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 8 A; 1 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 940 TTCATTGGTTTAA 952

13 TTTATTAGTTTAA 1

RESULT 1112

ABF00945
ID ABF00945 standard; DNA; 13 BP.

ABF00945;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 100942 for detecting SNP TSC0025123.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 100942; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 0 A; 9 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 932 CCCTCCTCTTCAT 944

1 CCCTCCCTCTTCT 13

RESULT 1113

ABC02477/C
ID ABC02477 standard; DNA; 13 BP.

```

XX ABC02477;
XX AC
XX DT 20-FEB-2002 (first entry)
XX X
XX DE Oligonucleotide SEQ ID NO 2468 for detecting SNP TSC00000994.
XX X
XX X SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX X peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX X central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX CS Homo sapiens.
XX X
XX FN WO200177384-A2.
XX X
XX PD 18-OCT-2001.
XX X
XX PF 06-APR-2001; 2001WO-IB000713.
XX X
XX PR 07-APR-2000; 2000DE-01019173.
XX X
XX PA (EPIG-) EPIGENOMICS AG.
XX X
XX PI Olek A, Piepenbrock C, Berlin K;
XX X
XX DR WPI; 2001-657177/75.
XX X
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX X
XX PS Claim 1; SEQ ID NO 2468; 29pp + Sequence Listing; German.
XX X
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX X
XX SQ Sequence 13 BP; 5 A; 4 C; 0 G; 4 T; 0 U; 0 Other;
XX X
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred.No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Oy 943 ATTGGTTTAATGT 955
Db ||||| |||||
13 ATAGGTGTAATGT 1

RESULT 1114
ABC52232/c
XX ID ABC52232 standard; DNA; 13 BP.
XX AC
XX X
XX X ABC52232;
XX X
XX DT 21-FEB-2002 (first entry)
XX X
XX DE Oligonucleotide SEQ ID NO 52249 for detecting SNP TSC0014524.
XX X
XX X SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX X peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX X central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX CS Homo sapiens.
XX X
XX FN WO200177384-A2.
XX X
XX PD 18-OCT-2001.
XX X
XX PF 06-APR-2001; 2001WO-IB000713.
XX X
XX PR 07-APR-2000; 2000DE-01019173.
XX X
XX PA (EPIG-) EPIGENOMICS AG.
XX X
XX PI Olek A, Piepenbrock C, Berlin K;
XX X
XX DR WPI; 2001-657177/75.
XX X
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX X
XX PS Claim 1; SEQ ID NO 52249; 29pp + Sequence Listing; German.
XX X
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX X
XX SQ Sequence 13 BP; 8 A; 0 C; 5 G; 0 T; 0 U; 0 Other;
XX X
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred.No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Oy 926 TTTTATCCCTCCT 938
Db ||||| |||||
13 TTTTCTCTCCT 1

RESULT 1115
ABC07408/c
XX ID ABC07408 standard; DNA; 13 BP.
XX AC
XX X
XX X ABC07408;
XX X
XX DT 20-FEB-2002 (first entry)
XX X
XX DE Oligonucleotide SEQ ID NO 7399 for detecting SNP TSC0002151.
XX X
XX X SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX X peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX X central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX CS Homo sapiens.
XX X
XX FN WO200177384-A2.
XX X
XX PD 18-OCT-2001.
XX X
XX PF 06-APR-2001; 2001WO-IB000713.
XX X
XX PR 07-APR-2000; 2000DE-01019173.
XX X
XX PA (EPIG-) EPIGENOMICS AG.
XX X
XX PI Olek A, Piepenbrock C, Berlin K;
XX X
XX DR WPI; 2001-657177/75.
XX X

```

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 7399; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 5 A; 0 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

931 TCCCTCTCTTCA 943
13 TCCCTCTCTTCA 1

RESULT 1116
ABC65245/C
ABC65245 standard; DNA; 13 BP.

ABC65245;
21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 65262 for detecting SNP TSC0017182.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.

06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 65262; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The

oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 9 A; 4 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

911 TCTTTGGTCTTG 923
13 TCTTTGGTCTTG 1

RESULT 1117
ABC66886
ID ABC66886 standard; DNA; 13 BP.

ABC66886;
21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 66903 for detecting SNP TSC0017534.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.

06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 66903; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 4 A; 0 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 940 TTCTTGGTTTAA 952
 DB 1 TTTATTGGTTAAA 13
 RESULT 1118
 ABF20842
 ID ABF20842 standard; DNA; 13 BP.
 XX
 AC ABF20842;
 XX
 DT 21-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 120839 for detecting SNP TSC0030156.
 XX
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 DT 18-OCT-2001.
 XX
 DE 06-APR-2001; 2001WO-IB000713.
 XX
 PF 07-APR-2000; 2000DE-01019173.
 XX
 PR (EPIG-) EPIGENOMICS AG.
 XX
 PA Olek A, Piepenbrock C, Berlin K;
 PI WPI; 2001-657177/75.
 DR
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 120839; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the invention. NOTE: The sequence
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 3 A; 0 C; 1 G; 9 T; 0 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 945 TGGTTTAAATGTAT 957
 DB 1 TTGTTTAAATTTAT 13
 RESULT 1119
 ABF93484/C
 ID ABF93484 standard; DNA; 13 BP.
 XX
 AC ABF93484;
 XX
 DT 22-FEB-2002 (first entry)
 XX

DE Oligonucleotide SEQ ID NO 193481 for detecting SNP TSC0047598.
 XX
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 DT 18-OCT-2001.
 XX
 DE 06-APR-2001; 2001WO-IB000713.
 XX
 PF 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 DR
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 193481; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the invention. NOTE: The sequence
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 6 A; 0 C; 5 G; 2 T; 0 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 931 TCCTCTCTCTTCA 943
 DB 13 TCCTCTCTCTTCA 1
 RESULT 1120
 ABF93485
 ID ABF93485 standard; DNA; 13 BP.
 XX
 AC ABF93485;
 XX
 DT 22-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 193482 for detecting SNP TSC0047598.
 XX
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 DT 18-OCT-2001.
 XX
 DE 06-APR-2001; 2001WO-IB000713.
 PF

```
PS 07-APR-2000; 2000DE-01019173.
XX (EPiG-) EPIGENOMICS AG.
CC Olek A, Piepenbrock C, Berlin K;
CC WPI; 2001-657177/75.
CC Set of oligonucleotides, useful for diagnosis and cell typing, is
CC designed to detect single-nucleotide polymorphisms and cytosine
CC methylation status.
CC Claim 1; SEQ ID NO 193482; 29pp + Sequence Listing; German.
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 2 A; 5 C; 0 G; 6 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 931 TCCCTCCTCTTCA 943
DB 1 TCTCTCATCTTCA 13
RESULT 1121
ABH21755
ABH21755 standard; DNA; 13 BP.
ABH21755;
22-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 221732 for detecting SNP TSC0053965.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB0000713.
07-APR-2000; 2000DE-01019173.
(EPiG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 148104; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligomers are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 931 TCCCTCCTCTTCA 943
DB 1 TCTCTCATCTTCA 13
RESULT 1122
ABF48107/c
ABF48107 standard; DNA; 13 BP.
ABF48107;
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 148104 for detecting SNP TSC0037394.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB0000713.
07-APR-2000; 2000DE-01019173.
(EPiG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 148104; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligomers are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
```

CC ftp.wipo.int/pub/published_pct_sequences

XX

SQ Sequence 13 BP; 6 A; 3 C; 1 G; 3 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;

Best Local Similarity 84.6%; Pred. No. 1.1e+03;

Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Cy 944 TTGGTTTAAATGTA 956

Db 13 TTGCTTTAATGGA 1

RESULT 1123

ABF99934

ID ABF99934 standard; DNA; 13 BP.

AC ABF99934;

XX

DT 22-FEB-2002 (first entry)

XX

DE Oligonucleotide SEQ ID NO 199931 for detecting SNP TSC0049190.

XX

DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;

XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

CS

WO200177384-A2.

PN

18-OCT-2001.

PD

XX

PF 06-APR-2001; 2001WO-IB000713.

XX

PR 07-APR-2000; 2000DE-01019173.

XX

PA (EPIG-) EPIGENOMICS AG.

XX

PI Olek A, Piepenbrock C, Berlin K;

XX

DR WPI; 2001-657177/75.

XX

PT Set of oligonucleotides, useful for diagnosis and cell typing, is

PT designed to detect single-nucleotide polymorphisms and cytosine

PT methylation status.

XX

PS Claim 1; SEQ ID NO 199931; 29pp + Sequence Listing; German.

XX

CC This invention describes novel oligonucleotide primers or peptide nucleic

CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

CC and cytosine methylation status in chemically pretreated genomic DNA. The

CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a

CC range of diseases including immune system, gastrointestinal, respiratory,

CC central nervous system, cardiovascular and metabolic disorders. The

CC oligomers are also used for detecting cell type differentiation. ABC00010

CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073

CC represent the oligomers described in the invention. NOTE: The sequence

CC data for this patent did not form part of the printed specification, but

CC was obtained in electronic format from WIPO at

CC ftp.wipo.int/pub/published_pct_sequences

XX

SQ Sequence 13 BP; 3 A; 0 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;

Best Local Similarity 84.6%; Pred. No. 1.1e+03;

Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Cy 947 GTTTAATGATATCG 959

Db 1 GTTTAGTGTATAG 13

RESULT 1125

ABH32576/c

ID ABH32576 standard; DNA; 13 BP.

AC ABH32576;

XX

DT 22-FEB-2002 (first entry)

XX

DE Oligonucleotide SEQ ID NO 232553 for detecting SNP TSC0056713.

XX

DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;

XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

CS

WO200177384-A2.

PN

18-OCT-2001.

PD

XX

PF 06-APR-2001; 2001WO-IB000713.

XX

PR 07-APR-2000; 2000DE-01019173.

XX

PA (EPIG-) EPIGENOMICS AG.

XX

PI Olek A, Piepenbrock C, Berlin K;

XX

DR WPI; 2001-657177/75.

XX

PT Set of oligonucleotides, useful for diagnosis and cell typing, is

PT designed to detect single-nucleotide polymorphisms and cytosine

PT methylation status.

XX

PS Claim 1; SEQ ID NO 199931; 29pp + Sequence Listing; German.

XX

CC This invention describes novel oligonucleotide primers or peptide nucleic

CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

CC and cytosine methylation status in chemically pretreated genomic DNA. The

CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a

CC range of diseases including immune system, gastrointestinal, respiratory,

CC central nervous system, cardiovascular and metabolic disorders. The

CC oligomers are also used for detecting cell type differentiation. ABC00010

CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073

CC represent the oligomers described in the invention. NOTE: The sequence

CC data for this patent did not form part of the printed specification, but

CC was obtained in electronic format from WIPO at

CC ftp.wipo.int/pub/published_pct_sequences

XX

SQ Sequence 13 BP; 3 A; 0 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;

Best Local Similarity 84.6%; Pred. No. 1.1e+03;

Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Cy 947 GTTTAATGATATCG 959

Db 1 GTTTAGTGTATAG 13

RESULT 1125

ABH32576/c

ID ABH32576 standard; DNA; 13 BP.

AC ABH32576;

XX

DT 22-FEB-2002 (first entry)

XX

DE Oligonucleotide SEQ ID NO 232553 for detecting SNP TSC0056713.

XX

DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;

XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

CS

WO200177384-A2.

PN

18-OCT-2001.

PD

XX

PF 06-APR-2001; 2001WO-IB000713.

XX

PR 07-APR-2000; 2000DE-01019173.

XX

PA (EPIG-) EPIGENOMICS AG.

XX

PI Olek A, Piepenbrock C, Berlin K;

XX

DR WPI; 2001-657177/75.

XX

PT Set of oligonucleotides, useful for diagnosis and cell typing, is

PT designed to detect single-nucleotide polymorphisms and cytosine

PT methylation status.

XX

PS Claim 1; SEQ ID NO 199931; 29pp + Sequence Listing; German.

XX

CC This invention describes novel oligonucleotide primers or peptide nucleic

CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

CC and cytosine methylation status in chemically pretreated genomic DNA. The

CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a

CC range of diseases including immune system, gastrointestinal, respiratory,

CC central nervous system, cardiovascular and metabolic disorders. The

CC oligomers are also used for detecting cell type differentiation. ABC00010

CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073

CC represent the oligomers described in the invention. NOTE: The sequence

CC data for this patent did not form part of the printed specification, but

CC was obtained in electronic format from WIPO at

CC ftp.wipo.int/pub/published_pct_sequences

XX

SQ Sequence 13 BP; 3 A; 0 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;

Best Local Similarity 84.6%; Pred. No. 1.1e+03;

Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Cy 947 GTTTAATGATATCG 959

Db 1 GTTTAGTGTATAG 13

RESULT 1125

ABH32576/c

ID ABH32576 standard; DNA; 13 BP.

AC ABH32576;

XX

DT 22-FEB-2002 (first entry)

XX

DE Oligonucleotide SEQ ID NO 232553 for detecting SNP TSC0056713.

XX

DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;

XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

CS

WO200177384-A2.

PN

18-OCT-2001.

PD

XX

PF 06-APR-2001; 2001WO-IB000713.

XX

PR 07-APR-2000; 2000DE-01019173.

XX

PA (EPIG-) EPIGENOMICS AG.

XX

PI Olek A, Piepenbrock C, Berlin K;

XX

DR WPI; 2001-657177/75.

XX

PT Set of oligonucleotides, useful for diagnosis and cell typing, is

PT designed to detect single-nucleotide polymorphisms and cytosine

PT methylation status.

XX

PS Claim 1; SEQ ID NO 199931; 29pp + Sequence Listing; German.

XX

CC This invention describes novel oligonucleotide primers or peptide nucleic

CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

CC and cytosine methylation status in chemically pretreated genomic DNA. The

CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a

CC range of diseases including immune system, gastrointestinal, respiratory,

CC central nervous system, cardiovascular and metabolic disorders. The

CC oligomers are also used for detecting cell type differentiation. ABC00010

CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073

CC represent the oligomers described in the invention. NOTE: The sequence

CC data for this patent did not form part of the printed specification, but

CC was obtained in electronic format from WIPO at

CC ftp.wipo.int/pub/published_pct_sequences

XX

SQ Sequence 13 BP; 3 A; 0 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;

Best Local Similarity 84.6%; Pred. No. 1.1e

Homo sapiens.
 WO200177384-A2.
 18-OCT-2001.
 06-APR-2001; 2001WO-IB000713.
 07-APR-2000; 2000DE-01019173.
 (EPIC-) EPIGENOMICS AG.
 Olek A, Piepenbrock C, Berlin K;
 WPI; 2001-657177/75.
 Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
 Claim 1; SEQ ID NO 232553; 29pp + Sequence Listing; German.
 This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABG9989, ABF0010-ABF9989, ABH0010-ABH9989 and ABI0010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 6 A; 0 C; 6 G; 1 T; 0 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

924 CCTTTTATCCCTC 936
 |||||
 13 CCATTTTCCCTC 1

RESULT 1126
 3F57607/C
 ABF57607 standard; DNA; 13 BP.
 ABF57607;
 21-FEB-2002 (first entry)
 Oligonucleotide SEQ ID NO 157604 for detecting SNP TSC0039698.
 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 central nervous system; gastrointestinal; respiratory; immune; metabolic.
 Homo sapiens.
 WO200177384-A2.
 18-OCT-2001.
 06-APR-2001; 2001WO-IB000713.
 07-APR-2000; 2000DE-01019173.
 (EPIC-) EPIGENOMICS AG.

PI Olek A, Piepenbrock C, Berlin K;
 DR WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
 XX Claim 1; SEQ ID NO 157604; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABG9989, ABF0010-ABF9989, ABH0010-ABH9989 and ABI0010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 943 ATTGGTTAATCT 955
 |||||
 Db 13 ATTGGTTAATTT 1

RESULT 1127
 ABF85491/C
 ID ABF85491 standard; DNA; 13 BP.
 XX ABF85491;
 XX 22-FEB-2002 (first entry)
 XX Oligonucleotide SEQ ID NO 185488 for detecting SNP TSC0001628.
 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 central nervous system; gastrointestinal; respiratory; immune; metabolic.
 Homo sapiens.
 WO200177384-A2.
 18-OCT-2001.
 06-APR-2001; 2001WO-IB000713.
 07-APR-2000; 2000DE-01019173.
 (EPIC-) EPIGENOMICS AG.
 Olek A, Piepenbrock C, Berlin K;
 WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
 XX Claim 1; SEQ ID NO 185488; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The

CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 6 A; 2 C; 0 G; 5 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 944 TTGCTTTAAATGTA 956
 DQ 13 TAGCTTTAAATATA 1

RESULT 1128
 ABF87623/C
 ID ABF87623 standard; DNA; 13 BP.
 AC
 XX ABF87623;
 XX
 DT 22-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 187620 for detecting SNP TSC0007370.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 DT 18-OCT-2001.
 XX
 DE 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 187620; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX

SQ Sequence 13 BP; 7 A; 2 C; 1 G; 3 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 932 CCCTCCTCTTCAT 944
 DQ 1 CCCTCCTCTTCCT 13

RESULT 1130
 ABF91912
 ID ABF91912 standard; DNA; 13 BP.
 XX
 AC ABF91912;

Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 940 TTCATTGCTTTAA 952
 DB 13 TTGATTGCTTTAA 1

RESULT 1129
 ABF63799
 ID ABF63799 standard; DNA; 13 BP.
 XX
 AC ABF63799;
 XX
 DT 22-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 163796 for detecting SNP TSC0010383.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 DT 18-OCT-2001.
 XX
 DE 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 163796; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX

SQ Sequence 13 BP; 0 A; 7 C; 0 G; 6 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 932 CCCTCCTCTTCAT 944
 DQ 1 CCCTCCTCTTCCT 13

RESULT 1130
 ABF91912
 ID ABF91912 standard; DNA; 13 BP.
 XX
 AC ABF91912;

```

22-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 191909 for detecting SNP TSC0047221.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 191909; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligomers are also used for detecting cell type differentiation. ABC00010
-ABG99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 3 A; 0 C; 4 G; 6 T; 0 U; 0 Other;
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligomers are also used for detecting cell type differentiation. ABC00010
-ABG99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 3 A; 0 C; 4 G; 6 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
944 TTGGTTTATGTA 956
|||||
1 TTGGTATAGTGA 13
RESULT 1131
PF91913/c
ABF91913 standard; DNA; 13 BP.
ABF91913;
22-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 191910 for detecting SNP TSC0047221.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 191910; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligomers are also used for detecting cell type differentiation. ABC00010
-ABG99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 3 A; 0 C; 4 G; 6 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
944 TTGGTTTATGTA 956
|||||
1 TTGGTATAGTGA 13
RESULT 1132
ABH42481/c
ID ABH42481 standard; DNA; 13 BP.
AC ABH42481;
XX
XX
22-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 242458 for detecting SNP TSC0059123.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is

```

PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.

XX Claim 1; SEQ ID NO 242458; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences

SQ Sequence 13 BP; 8 A; 2 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 941 TCATTGGTTTAAAT 953

DB 13 TAATTGGTTTAT 1

RESULT 1133

ABH42676/c

ID ABH42676 standard; DNA; 13 BP.

XX

AC ABH42676;

XX 22-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 242653 for detecting SNP TSC0059200.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX

FS Claim 1; SEQ ID NO 242653; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073

CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 7 A; 0 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 926 TTTTATCCCTCCT 938

DB 13 TTATTTCCTCCT 1

RESULT 1134

ABH49971

ID ABH49971 standard; DNA; 13 BP.

XX

AC ABH49971;

XX 22-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 249948 for detecting SNP TSC0061046.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX

FS Claim 1; SEQ ID NO 249948; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 1 A; 7 C; 0 G; 5 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;

Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 932 CCTCTCTCTTCAAT 944

||||| |||||

```

1 CCTCATCTTCT 13
RESULT 1135
ABC17629/c
ABC17629 standard; DNA; 13 BP.
ABC17629;
20-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 17636 for detecting SNP TSC0003780.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 17636; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation.
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 9 A; 2 C; 0 G; 2 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
940 TTCATTGGTTTAA 952
13 TTTATTGGTTTAA 1
SULT 1136
F00944/c
ABF00944 standard; DNA; 13 BP.
ABF00944;
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 100941 for detecting SNP TSC0025123.
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 100941; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation.
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and AB100010-AB182073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX Sequence 13 BP; 4 A; 0 C; 9 G; 0 T; 0 U; 0 Other;
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 932 CCTCTCTTTCAT 944
DB 13 CCTCTCTTTCAT 1
RESULT 1137
ABC01430
ID ABC01430 standard; DNA; 13 BP.
XX
XX ABC01430;
XX 20-FEB-2002 (first entry)
XX Oligonucleotide SEQ ID NO 1421 for detecting SNP TSC0000501.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.

```

XX PA (EPIG-) EPIGENOMICS AG.
 XX PI Olek A, Piepenbrock C, Berlin K;
 XX DR WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 1421; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 4 A; 0 C; 2 G; 7 T; 0 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 940 TTCATTGCTTTAA 952
 DQ 1 TTTATTGCTATAA 13
 RESULT 1138
 ABC02479/c
 ID ABC02479 standard; DNA; 13 BP.
 XX AC ABC02479;
 XX 20-FEB-2002 (first entry)
 XX Oligonucleotide SEQ ID NO 2470 for detecting SNP TSC0000994.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 OS WO200177384-A2.
 PN 18-OCT-2001.
 XX PD 06-APR-2001; 2001WO-IB000713.
 XX PF 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 2470; 29pp + Sequence Listing; German.

CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 5 A; 3 C; 0 G; 5 T; 0 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 943 ATTGCTTTAATGT 955
 DQ 13 ATAGGTATAATGT 1
 RESULT 1139
 ABC27658
 ID ABC27658 standard; DNA; 13 BP.
 XX AC ABC27658;
 XX 20-FEB-2002 (first entry)
 XX Oligonucleotide SEQ ID NO 27675 for detecting SNP TSC00007753.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 OS WO200177384-A2.
 PN 18-OCT-2001.
 XX PD 06-APR-2001; 2001WO-IB000713.
 XX PF 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 27675; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX

```

Sequence 13 BP; 1 A; 0 C; 2 G; 10 T; 0 U; 0 Other;
Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

      938 TCTTCATTGGTTT 950
      ||| ||| ||| |||
      1 TTTTATTGGTTT 13

RESULT 1140
CS2722
ABC52722 standard; DNA; 13 BP.
ABC52722;
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 52739 for detecting SNP TSC0014605.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPTG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 52739; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 1 A; 0 C; 2 G; 10 T; 0 U; 0 Other;
Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

      904 GTCAATTTCTTTG 916
      ||| ||| ||| |||
      1 GTTATTTTCTTG 13

RESULT 1141
3C79542
ABC52722 standard; DNA; 13 BP.
ABC52722;
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 36713 for detecting SNP TSC0011500.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPTG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 79559; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 2 A; 0 C; 3 G; 8 T; 0 U; 0 Other;
Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

      940 TTCATTGGTTTAA 952
      ||| ||| ||| |||
      1 TTGTTTGGTTTAA 13

RESULT 1142
ABC36696
ABC36696 standard; DNA; 13 BP.
ABC36696;
20-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 36713 for detecting SNP TSC0011500.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPTG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 79559; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

```

XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 36713; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC000010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX Sequence 13 BP; 2 A; 0 C; 2 G; 9 T; 0 U; 0 Other;
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 945 TGGTTTAAATGAT 957
DB 1 TGTATTATTGAT 13
RESULT 1143
ABC12391/c
ID ABC12391 standard; DNA; 13 BP.
XX ABC12391;
XX 20-FEB-2002 (first entry)
XX Oligonucleotide SEQ ID NO 12398 for detecting SNP TSC0002937.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC000010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX Sequence 13 BP; 2 A; 0 C; 2 G; 9 T; 0 U; 0 Other;
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 945 TGGTTTAAATGAT 957
DB 1 TGTATTATTGAT 13
RESULT 1143
ABC12391/c
ID ABC12391 standard; DNA; 13 BP.
XX ABC12391;
XX 20-FEB-2002 (first entry)
XX Oligonucleotide SEQ ID NO 12398 for detecting SNP TSC0002937.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC000010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX Sequence 13 BP; 2 A; 0 C; 2 G; 9 T; 0 U; 0 Other;
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

DR WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 12398; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC000010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX Sequence 13 BP; 11 A; 2 C; 0 G; 0 T; 0 U; 0 Other;
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 910 TTCTTTGGTCTTT 922
DB 13 TTTTGGTTTT 1
RESULT 1144
ABC39369/c
ID ABC39369 standard; DNA; 13 BP.
XX ABC39369;
XX 20-FEB-2002 (first entry)
XX Oligonucleotide SEQ ID NO 39386 for detecting SNP TSC0012055.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 39386; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC000010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX Sequence 13 BP; 11 A; 2 C; 0 G; 0 T; 0 U; 0 Other;
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 9 A; 2 C; 0 G; 2 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

944 TTGGTTTAAATGA 956

13 TTGGTTTAAATGA 1

SULT 1145

C91479/c

ABC91479 standard; DNA; 13 BP.

ABC91479;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 91496 for detecting SNP TSC0022909.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 91496; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 9 A; 2 C; 0 G; 2 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 903 GGTCAATTTCTTT 915

Db 13 GGTAAATTTTTTT 1

RESULT 1146

ABF19924/c

ID ABF19924 standard; DNA; 13 BP.

XX ABF19924;

DT 21-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 119921 for detecting SNP TSC0029932.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 119921; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 8 A; 0 C; 5 G; 0 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 927 TTTATCCCTCCTC 939

Db 13 TTTTTCCTTCCTC 1

RESULT 1147

ABF20728

ID ABF20728 standard; DNA; 13 BP.

XX ABF20728;

DT 21-FEB-2002 (first entry)


```

XX DE Oligonucleotide SEQ ID NO 120725 for detecting SNP TSC0030124.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX HW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX CS Homo sapiens.
XX JX WO200177384-A2.
XX PN 18-OCT-2001.
XX PD
XX FF 06-APR-2001; 2001WO-IB000713.
XX JX 07-APR-2000; 2000DE-01019173.
XX JX (EPIG-) EPIGENOMICS AG.
XX PA Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX JX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX PS Claim 1; SEQ ID NO 120725; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 4 A; 0 C; 3 G; 6 T; 0 U; 0 Other;
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 940 TTCATTGGGTTAA 952
Db ||||| |||||
1 TTAATTGGGTTAA 13
RESULT 1148
ABF31355
ID ABF31355 standard; DNA; 13 BP.
XX AC ABF31355;
XX DT 21-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 131352 for detecting SNP TSC0032783.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX JX WO200177384-A2.
XX PN 18-OCT-2001.
XX PD
XX PF 06-APR-2001; 2001WO-IB000713.
XX JX 07-APR-2000; 2000DE-01019173.
XX JX (EPIG-) EPIGENOMICS AG.
XX PA Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX JX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX PT

```

```

PF 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
PI Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX PS Claim 1; SEQ ID NO 131352; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 1 A; 5 C; 0 G; 7 T; 0 U; 0 Other;
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 931 TCCTCTCTCTTCA 943
Db ||||| |||||
1 TCCTCTCTCTTCA 13
RESULT 1149
ABF33005
ID ABF33005 standard; DNA; 13 BP.
XX AC ABF33005;
XX DT 21-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 133002 for detecting SNP TSC0033182.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX JX WO200177384-A2.
XX PN 18-OCT-2001.
XX PD
XX PF 06-APR-2001; 2001WO-IB000713.
XX JX 07-APR-2000; 2000DE-01019173.
XX JX (EPIG-) EPIGENOMICS AG.
XX PA Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX JX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX PT

```

Claim 1; SEQ ID NO 133002; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 2 A; 5 C; 1 G; 5 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

931 TCCTCTCTCTTCA 943
|||||
1 TCCTCTCTTCA 13

SULT 1150

F35070
ABF35070 standard; DNA; 13 BP.

ABF35070;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 135067 for detecting SNP TSC0033671.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 135067; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but

CC was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

SQ Sequence 13 BP; 3 A; 1 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 940 TTCATTGGTTTAA 952
|||||
Db 1 TTCATGGTTTAA 13

RESULT 1151

ABF40194/c
ID ABF40194 standard; DNA; 13 BP.

XX
AC ABF40194;

DT 21-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 140191 for detecting SNP TSC0035122.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

OS Homo sapiens.

PN WO200177384-A2.

PD 18-OCT-2001.

PF 06-APR-2001; 2001WO-IB000713.

PR 07-APR-2000; 2000DE-01019173.

PA (EPIG-) EPIGENOMICS AG.

PI Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 140191; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

SQ Sequence 13 BP; 10 A; 0 C; 2 G; 1 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 919 CTTTGCTTTTAT 931
|||||
Db 13 CTTTCTTTTAT 1

Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 161606; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 1 A; 4 C; 0 G; 8 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

900 CCTGCTATTTC 912
|||||
1 CCTTTTCATTTC 13

SULT 1155

H37513/c
ABH37513 standard; DNA; 13 BP.

ABH37513;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 237490 for detecting SNP TSC0057923.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 237490; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX

Sequence 13 BP; 6 A; 2 C; 0 G; 5 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 950 TAAATGATATGCTA 962
|||||
Db 13 TAAATGATATGCTA 1

RESULT 1156

ABF62345
ID ABF62345 standard; DNA; 13 BP.

AC ABF62345;

XX 22-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 162342 for detecting SNP TSC0040831.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 162342; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 2 A; 5 C; 0 G; 6 T; 0 U; 0 Other;

AC	ABF62877;	
XX		
DT	22-FEB-2002	(first entry)
XX		
DE	Oligonucleotide SEQ ID NO 162874 for detecting SNP	TSC0040950.
XX		
KW	SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;	
KW	peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;	
KW	central nervous system; gastrointestinal; respiratory; immune; metabolic.	
XX		
OS	Homo sapiens.	
XX		
PN	WO200177384-A2.	
XX		
PD	18-OCT-2001.	
XX		
PF	06-APR-2001; 2001WO-IB000713.	
XX		
PR	07-APR-2000; 2000DE-01019173.	
XX		
PA	(EPIG-) EPIGENOMICS AG.	
XX		
PI	Olek A, Piepenbrock C, Berlin K;	
XX		
DR	WPI; 2001-657177/75.	
XX		
PT	Set of oligonucleotides, useful for diagnosis and cell typing, is	
PT	designed to detect single-nucleotide polymorphisms and cytosine	
PT	methylation status.	
XX		
PS	Claim 1; SEQ ID NO 162874; 29pp + Sequence Listing; German.	
XX		
CC	This invention describes novel oligonucleotide primers or peptide nucleic	
CC	acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)	
CC	and cytosine methylation status in chemically pretreated genomic DNA. The	
CC	oligonucleotides are used for diagnosis and/or prognosis of cancer and a	
CC	range of diseases including immune system, gastrointestinal, respiratory,	
CC	central nervous system, cardiovascular and metabolic disorders. The	
CC	oligomers are also used for detecting cell type differentiation. ABC00010	
CC	-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073	
CC	represent the oligomers described in the invention. NOTE: The sequence	
CC	data for this patent did not form part of the printed specification, but	
CC	was obtained in electronic format from WIPO at	
CC	ftp.wipo.int/pub/published_pct_sequences	
XX		
SQ	Sequence 13 BP; 2 A; 8 C; 0 G; 3 T; 0 U; 0 Other;	
	Query Match	13.4%; Score 9.8; DB 1; Length 13;
	Best Local Similarity	84.6%; Pred. No. 1.le+03;
	Matches 11; Conservative	0; Mismatches 2; Indels 0; Gaps 0
Qy	932 CCTCTCTCTTCAT	944
Db	1 CCTCTCAGCTCAT	13
RESULT 1159		
ABH42677		
ID	ABH42677 standard; DNA; 13 BP.	
XX		
AC	ABH42677;	
XX		
DT	22-FEB-2002	(first entry)
XX		
DE	Oligonucleotide SEQ ID NO 242654 for detecting SNP	TSC0059200.
XX		
KW	SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;	
KW	peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;	
KW	central nervous system; gastrointestinal; respiratory; immune; metabolic.	
XX		
OS	Homo sapiens.	
XX		
PN	WO200177384-A2.	

18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 242654; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 1 A; 5 C; 0 G; 7 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
926 TTTTATCCCTCCT 938
1 TTTTATCCCTCCT 13
RESULT 1160
ABH49489/c
ABH49489 standard; DNA; 13 BP.
ABH49489;
22-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 249466 for detecting SNP TSC0060939.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.

PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 249466; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 8 A; 3 C; 0 G; 2 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 940 TTCATTGGTTTAA 952
DB 13 TTTTGGTTTAA 1
RESULT 1161
ABH63369/c
ID ABH63369 standard; DNA; 13 BP.
XX
AC ABH63369;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 263346 for detecting SNP TSC0063861.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
DR
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 263346; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010

CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
EQ Sequence 13 BP; 8 A; 2 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 944 TTGGTTTAATGTA 956
||| ||| ||| ||| |||
Db 13 TTAGTTTATGTA 1

RESULT 1162
ABC73890
ID ABC73890 standard; DNA; 13 BP.
XX
AC ABC73890;
XX
DT 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 73907 for detecting SNP TSC0019023.
DE
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
FN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 73907; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 0 A; 0 C; 2 G; 11 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 909 TTACTTTGGTCTT 921

CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
EQ Sequence 13 BP; 8 A; 2 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 902 TGCTCATTTTCTT 914
||| ||| ||| ||| |||
Db 13 TGCTTATTTTCTT 1

RESULT 1164
ABC25061
ID ABC25061 standard; DNA; 13 BP.
XX
AC ABC25061;
XX
DT 20-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 25078 for detecting SNP TSC0006091.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPITG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.

Claim 1; SEQ ID NO 25078; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 2 A; 8 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

930 ATCCCTCCCTTC 942

1 ATCCCTCCCTTAC 13

RESULT 1165

ABC49928

ABC49928 standard; DNA; 13 BP.

ABC49928;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 49945 for detecting SNP TSC0014079.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPITG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.

Claim 1; SEQ ID NO 49945; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 2 A; 0 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 945 TGGTTTAAATGAT 957

Db 1 TGGTTTAAATGAT 13

RESULT 1166

ABC49929/c

ID ABC49929 standard; DNA; 13 BP.

ABC49929;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 49946 for detecting SNP TSC0014079.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPITG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.

Claim 1; SEQ ID NO 49946; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

XX Sequence 13 BP; 6 A; 5 C; 0 G; 2 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 945 TGGTTTAAATGTAT 957
13 TGGTTTAGGTAT 1

RESULT 1167
ABC50445/c
ID ABC50445 standard; DNA; 13 BP.
AC ABC50445;
XX
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 50462 for detecting SNP TSC0014180.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
XX
XX Claim 1; SEQ ID NO 50462; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

XX
SQ Sequence 13 BP; 9 A; 2 C; 0 G; 2 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 904 GTCATTTCTTTG 916
13 GTTATTTTATTG 1

Db

RESULT 1168
ABC07560/c
ID ABC07560 standard; DNA; 13 BP.
XX
XX ABC07560;
XX
XX 20-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 7551 for detecting SNP TSC0002177.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
XX
XX Claim 1; SEQ ID NO 7551; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

XX
SQ Sequence 13 BP; 3 A; 2 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 955 TATCGTACCAAC 967
13 TCTCGCTACGAC 1

Db

RESULT 1169

```
C09417
ABC09417 standard; DNA; 13 BP.
ABC09417;
20-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 9408 for detecting SNP TSC0002484.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 9408; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 2 A; 2 C; 0 G; 9 T; 0 U; 0 Other;
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 2 A; 2 C; 0 G; 9 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
918 TCTTTGCCCTTTTA 930
|||||
1 TCTTTTCATTTA 13
RESULT 1170
ABC0408
ABC0408 standard; DNA; 13 BP.
ABC0408;
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 84065 for detecting SNP TSC0021145.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 84065; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 0 A; 0 C; 3 G; 10 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
909 TTCTTTGGCTTT 921
|||||
1 TTCTTTGGCTTT 13
RESULT 1171
ABC85812
ABC85812 standard; DNA; 13 BP.
ABC85812;
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 85829 for detecting SNP TSC0021562.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
```

XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 85829; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX Sequence 13 BP; 2 A; 0 C; 2 G; 9 T; 0 U; 0 Other;
 SQ Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 905 TCATTTCTTTGG 917
 D5 1 TTTATTTATTTGG 13

RESULT 1172
 ABC63520
 ID ABC63520 standard; DNA; 13 BP.
 AC ABC63520;
 XX 21-FEB-2002 (first entry)
 DT Oligonucleotide SEQ ID NO 63537 for detecting SNP TSC0016784.
 DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 OS WO200177384-A2.
 PN 18-OCT-2001.
 PD 06-APR-2001; 2001WO-IB000713.
 PF 07-APR-2000; 2000DE-01019173.
 PR (EPIG-) EPIGENOMICS AG.
 PA Olek A, Piepenbrock C, Berlin K;
 PI WPI; 2001-657177/75.
 DR Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 63537; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a

CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX Sequence 13 BP; 2 A; 0 C; 2 G; 9 T; 0 U; 0 Other;
 SQ Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 945 TGGTTTAATGTAT 957
 D5 1 TGGTTTAATTTT 13

RESULT 1173
 ABC63987
 ID ABC63987 standard; DNA; 13 BP.
 AC ABC63987;
 XX 21-FEB-2002 (first entry)
 DT Oligonucleotide SEQ ID NO 64004 for detecting SNP TSC0016893.
 DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 OS WO200177384-A2.
 PN 18-OCT-2001.
 PD 06-APR-2001; 2001WO-IB000713.
 PF 07-APR-2000; 2000DE-01019173.
 PR (EPIG-) EPIGENOMICS AG.
 PA Olek A, Piepenbrock C, Berlin K;
 PI WPI; 2001-657177/75.
 DR Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 64004; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX Sequence 13 BP; 2 A; 6 C; 0 G; 5 T; 0 U; 0 Other;
 SQ Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;

```

Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
932 CCCTCCTCTTCAT 944
|||||
1 CCCTCCTCATAT 13

SULT 1174
C64467
ABC64467 standard; DNA; 13 BP.
ABC64467;

21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 64484 for detecting SNP TSC0017004.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 64484; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 3 A; 5 C; 0 G; 5 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

931 TCCTCCTCTTCA 943
|||||
1 TCCTACTCTTCA 13

SULT 1175
C40098/c
ABC40098 standard; DNA; 13 BP.
ABC40098;

```

```

DT 21-FEB-2002 (first entry)
XX Oligonucleotide SEQ ID NO 40115 for detecting SNP TSC0012202.
DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
KW Homo sapiens.
XX WO200177384-A2.
XX PN 18-OCT-2001.
XX PD
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
DR Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX PS Claim 1; SEQ ID NO 40115; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 13 BP; 9 A; 0 C; 3 G; 1 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 918 TCCTTGCCCTTTA 930
|||||
Db 13 TCCTTCTCTTTA 1

RESULT 1176
ABF37092
ID ABF37092 standard; DNA; 13 BP.
XX
XX AC ABF37092;
XX
XX DT 21-FEB-2002 (first entry)
XX
XX DE Oligonucleotide SEQ ID NO 137089 for detecting SNP TSC0034252.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX OS
XX PN WO200177384-A2.
XX
XX PD 18-OCT-2001.

```

```

XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 137089; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 1 A; 0 C; 3 G; 9 T; 0 U; 0 Other;
SQ
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 903 GGTCAATTTCTTT 915
Db 1 GGTATTTTGTGT 13
RESULT 1177
ABF40337/c
ID ABF40337 standard; DNA; 13 BP.
XX AC ABF40337;
XX 21-FEB-2002 (first entry)
XX Oligonucleotide SEQ ID NO 140334 for detecting SNP TSC0035176.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX OS
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 140334; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 1 A; 0 C; 3 G; 9 T; 0 U; 0 Other;
SQ
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 903 GGTCAATTTCTTT 915
Db 1 GGTATTTTGTGT 13

```

```

PT methylation status.
XX Claim 1; SEQ ID NO 140334; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;
SQ
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 944 TTGTTTAAATGTA 956
Db 13 TTGTTTAAATGTA 1
RESULT 1178
ABF40340
ID ABF40340 standard; DNA; 13 BP.
XX AC ABF40340;
XX 21-FEB-2002 (first entry)
XX Oligonucleotide SEQ ID NO 140337 for detecting SNP TSC0035176.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX OS
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 140337; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence

```

data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 2 A; 1 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

944 TTGGTTTAATGTA 956

1 TCGGTTTATTGTA 13

RESULT 1179

ABF40341/c
ABF40341 standard; DNA; 13 BP.

ABF40341;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 140338 for detecting SNP TSC0095176.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 140338; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 7 A; 3 C; 1 G; 2 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

944 TTGGTTTAATGTA 956

1 TCGGTTTATTGTA 13

RESULT 1180

ABF69855/c
ABF69855 standard; DNA; 13 BP.

ABF69855;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 169852 for detecting SNP TSC0042415.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 169852; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 10 A; 2 C; 0 G; 1 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 910 TTCTTTGGTCTTT 922

Db 13 TTATTTGGTTTTT 1

RESULT 1181

ABF98051/c
ABF98051 standard; DNA; 13 BP.

ABF98051;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 198048 for detecting SNP TSC0048746.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 XX WO200177384-A2.
 XX 18-OCT-2001.
 XX PD
 XX PF 06-APR-2001; 2001WO-IB000713.
 XX PR 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 198048; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX Sequence 13 BP; 8 A; 3 C; 0 G; 2 T; 0 U; 0 Other;
 SQ Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 944 TTGCTTTAATGTA 956
 Db 13 TTTGTTAGTGA 1
 RESULT 1182
 ABF99129/c
 ID ABF99129 standard; DNA; 13 BP.
 XX AC ABF99129;
 XX 22-FEB-2002 (first entry)
 XX Oligonucleotide SEQ ID NO 199126 for detecting SNP TSC0049008.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 XX WO200177384-A2.
 XX 18-OCT-2001.
 XX PF 06-APR-2001; 2001WO-IB000713.
 XX PR 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 228957; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic

PA (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 199126; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX Sequence 13 BP; 9 A; 3 C; 0 G; 1 T; 0 U; 0 Other;
 SQ Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 905 TCATTTCTTTGG 917
 Db 13 TCATTTCTTTGG 1
 RESULT 1183
 ABH28980/c
 ID ABH28980 standard; DNA; 13 BP.
 XX AC ABH28980;
 XX 22-FEB-2002 (first entry)
 XX Oligonucleotide SEQ ID NO 228957 for detecting SNP TSC0055846.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 XX WO200177384-A2.
 XX 18-OCT-2001.
 XX PF 06-APR-2001; 2001WO-IB000713.
 XX PR 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 228957; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic

acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 6 A; 0 C; 7 G; 0 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

925 CTTTATCCCTCC 937

|||||
13 CTTTATCCCTCC 1

RESULT 1184

ABF82322 standard; DNA; 13 BP.

ABF82322;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 182319 for detecting SNP TSC0045058.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 182319; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 940 TTCATTGGTTAA 952

|||||
Db 1 TTCATTGGTTAA 13

RESULT 1185

ABF62344/c
ABF62344 standard; DNA; 13 BP.

AC ABF62344;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 162341 for detecting SNP TSC0040831.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 162341; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 6 A; 0 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 929 TATCCCTCCTCTT 941

|||||
Db 13 TATCCCTCCTCTT 1

RESULT 1186

ABH43548/c
ID ABH43548 standard; DNA; 13 BP.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 93219; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 4 A; 1 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

928 TTATCCCTCCTCT 940
||||| |||
13 TTATCCGCGCCCT 1

RESULT 1189

ABC93918
ABC93918 standard; DNA; 13 BP.

ABC93918;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 93935 for detecting SNP TSC0023471.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
Peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
Central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 93935; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The

CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

SQ Sequence 13 BP; 5 A; 0 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 941 TCATTGGTTTAAAT 953
||||| |||
Db 1 TAAATAGGTTTAAAT 13

RESULT 1190

ABC69699
ID ABC69699 standard; DNA; 13 BP.

AC ABC69699;

XX 21-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 69716 for detecting SNP TSC0018143.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 69716; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

SQ Sequence 13 BP; 0 A; 6 C; 0 G; 7 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

CV      927 TTTATCCCTCCTC 939
Eb      ||| |||||
        1 TTTCTTCTCCTC 13

RESULT 1191
ID      ABC95908/c
XX      ABC95908 standard; DNA; 13 BP.
AC      ABC95908;
XX      21-FEB-2002 (first entry)
XX      Oligonucleotide SEQ ID NO 95925 for detecting SNP TSC0023860.
XX      SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW      peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW      central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX      Homo sapiens.
XX      WO200177384-A2.
XX      18-OCT-2001.
XX      06-APR-2001; 2001WO-IB000713.
XX      07-APR-2000; 2000DE-01019173.
XX      (EPIG-) EPIGENOMICS AG.
XX      Olek A, Piepenbrock C, Berlin K;
XX      WPI; 2001-657177/75.
XX      Set of oligonucleotides, useful for diagnosis and cell typing, is
XX      designed to detect single-nucleotide polymorphisms and cytosine
XX      methylation status.
XX      Claim 1; SEQ ID NO 95925; 29pp + Sequence Listing; German.
XX      This invention describes novel oligonucleotide primers or peptide nucleic
XX      acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX      and cytosine methylation status in chemically pretreated genomic DNA. The
XX      oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX      range of diseases including immune system, gastrointestinal, respiratory,
XX      central nervous system, cardiovascular and metabolic disorders. The
XX      oligomers are also used for detecting cell type differentiation. ABC00010
XX      -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX      represent the oligomers described in the invention. NOTE: The sequence
XX      data for this patent did not form part of the printed specification, but
XX      was obtained in electronic format from WIPO at
XX      ftp.wipo.int/pub/published_pct_sequences
XX      Claim 1; SEQ ID NO 95925; 29pp + Sequence Listing; German.
XX      This invention describes novel oligonucleotide primers or peptide nucleic
XX      acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX      and cytosine methylation status in chemically pretreated genomic DNA. The
XX      oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX      range of diseases including immune system, gastrointestinal, respiratory,
XX      central nervous system, cardiovascular and metabolic disorders. The
XX      oligomers are also used for detecting cell type differentiation. ABC00010
XX      -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX      represent the oligomers described in the invention. NOTE: The sequence
XX      data for this patent did not form part of the printed specification, but
XX      was obtained in electronic format from WIPO at
XX      ftp.wipo.int/pub/published_pct_sequences
XX      Sequence 13 BP; 3 A; 1 C; 4 G; 5 T; 0 U; 0 Other;
XX      Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX      Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX      Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      953 TGTATCGCTACCA 965
Db      ||| |||||
        13 TATAAGCTTACCA 1

RESULT 1192
ID      ABC97276/c
XX      ABC97276 standard; DNA; 13 BP.
AC      ABC97276;
XX      21-FEB-2002 (first entry)
XX      Oligonucleotide SEQ ID NO 25351 for detecting SNP TSC0006236.
XX      SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW      peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW      central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX      Homo sapiens.
XX      WO200177384-A2.
XX      18-OCT-2001.
XX      06-APR-2001; 2001WO-IB000713.

```

```

DE      Oligonucleotide SEQ ID NO 97293 for detecting SNP TSC0024130.
XX      SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW      peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW      central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX      Homo sapiens.
XX      WO200177384-A2.
XX      18-OCT-2001.
XX      06-APR-2001; 2001WO-IB000713.
XX      07-APR-2000; 2000DE-01019173.
XX      (EPIG-) EPIGENOMICS AG.
XX      Olek A, Piepenbrock C, Berlin K;
XX      WPI; 2001-657177/75.
XX      Set of oligonucleotides, useful for diagnosis and cell typing, is
XX      designed to detect single-nucleotide polymorphisms and cytosine
XX      methylation status.
XX      Claim 1; SEQ ID NO 97293; 29pp + Sequence Listing; German.
XX      This invention describes novel oligonucleotide primers or peptide nucleic
XX      acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX      and cytosine methylation status in chemically pretreated genomic DNA. The
XX      oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX      range of diseases including immune system, gastrointestinal, respiratory,
XX      central nervous system, cardiovascular and metabolic disorders. The
XX      oligomers are also used for detecting cell type differentiation. ABC00010
XX      -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX      represent the oligomers described in the invention. NOTE: The sequence
XX      data for this patent did not form part of the printed specification, but
XX      was obtained in electronic format from WIPO at
XX      ftp.wipo.int/pub/published_pct_sequences
XX      Sequence 13 BP; 4 A; 0 C; 7 G; 2 T; 0 U; 0 Other;
XX      Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX      Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX      Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      924 CCTTTTATCCCTC 936
Db      ||| |||||
        13 CCTTTTATCCAC 1

RESULT 1193
ID      ABC25334
XX      ABC25334 standard; DNA; 13 BP.
AC      ABC25334;
XX      20-FEB-2002 (first entry)
XX      Oligonucleotide SEQ ID NO 25351 for detecting SNP TSC0006236.
XX      SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW      peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW      central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX      Homo sapiens.
XX      WO200177384-A2.
XX      18-OCT-2001.
XX      06-APR-2001; 2001WO-IB000713.

```

```
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 25351; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 0 A; 0 C; 3 G; 10 T; 0 U; 0 Other;
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 0 A; 0 C; 3 G; 10 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 910 TTCTTTGGTCTTT 922
DB 13 TTGTTGGTCTTT 1
RESULT 1195
ABF06601
ID ABF06601 standard; DNA; 13 BP.
XX
AC ABF06601;
XX
DT 21-FEB-2002 (first entry)
DE Oligonucleotide SEQ ID NO 106598 for detecting SNP TSC0026700.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
WPI; 2001-657177/75.
XX
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 106598; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 0 A; 0 C; 3 G; 10 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
909 TTCTTTGGTCTTT 921
1 TTTTGGTCTTT 13
RESULT 1194
IC76533/c
ABC76533 standard; DNA; 13 BP.
ABC76533;
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 76550 for detecting SNP TSC0019571.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
```

```

CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 3 A; 5 C; 0 G; 5 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 953 TGTATCGCTACCA 965
Lb 1 TTTATCCTCTACCA 13

RESULT 1196
ABC31866
ID ABC31866 standard; DNA; 13 BP.
AC ABC31866;
XX
DT 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 31863 for detecting SNP TSC0003927.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 31863; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: the sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 1 A; 0 C; 3 G; 9 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 909 TTTCTTTGGCTT 921
Lb 1 TTTATTTGGGT 13

RESULT 1197
ABC07409
ID ABC07409 standard; DNA; 13 BP.
XX
AC ABC07409;
XX
DT 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 7400 for detecting SNP TSC0002151.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 7400; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 1 A; 7 C; 0 G; 5 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 931 TCCTCTCTCTTCA 943
Lb 1 TCCTCTCTCTCTCA 13

RESULT 1198
ABC84496/C
ID ABC84496 standard; DNA; 13 BP.
XX
AC ABC84496;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 84513 for detecting SNP TSC0021261.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

```

Homo sapiens.
 WO200177384-A2.
 18-OCT-2001.
 06-APR-2001; 2001WO-IB000713.
 07-APR-2000; 2000DE-01019173.
 (EPIG-) EPIGENOMICS AG.
 Olek A, Piepenbrock C, Berlin K;
 WPI; 2001-657177/75.
 Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
 Claim 1; SEQ ID NO 84513; 29pp + Sequence Listing; German.
 This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

941 TCATTGGTTTAAAT 953
 13 TCATCGTTTAAAT 1

RESULT 1199
 ABC84499
 ABC84499 standard; DNA; 13 BP.
 ABC84499;
 21-FEB-2002 (first entry)
 Oligonucleotide SEQ ID NO 84516 for detecting SNP TSC0021261.
 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 central nervous system; gastrointestinal; respiratory; immune; metabolic.
 Homo sapiens.
 WO200177384-A2.
 18-OCT-2001.
 06-APR-2001; 2001WO-IB000713.
 07-APR-2000; 2000DE-01019173.
 (EPIG-) EPIGENOMICS AG.

PI Olek A, Piepenbrock C, Berlin K;
 DR WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 XX designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 PT
 XX Claim 1; SEQ ID NO 84516; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 3 A; 3 C; 1 G; 6 T; 0 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 941 TCATTGGTTTAAAT 953
 DB 1 TCATCGTTTAAAT 13

RESULT 1200
 ABC11014/c
 ID ABC11014 standard; DNA; 13 BP.
 XX
 AC ABC11014;
 XX
 DT 20-FEB-2002 (first entry)
 XX
 DE Oligonucleotide SEQ ID NO 11005 for detecting SNP TSC0002724.
 XX
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 PN WO200177384-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 XX (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 XX WPI; 2001-657177/75.
 XX
 PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 PS Claim 1; SEQ ID NO 11005; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The

CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

SQ Sequence 13 BP; 7 A; 0 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 920 TTGCGCTTTATC 932
 ||| ||||| |||||
 Db 13 TTCCCTTCTATC 1

RESULT 1201
 ABC38991/c
 ID ABC38991 standard; DNA; 13 BP.

XX ABC38991;

XX 20-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 39008 for detecting SNP TSC0011996.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.

PS Claim 1; SEQ ID NO 39008; 29pp + Sequence Listing; German.

CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

SQ Sequence 13 BP; 9 A; 3 C; 0 G; 1 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;

Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 905 TCATTTCTTTGG 917
 ||||| |||||
 Db 13 TTATTTCTTTGG 1

RESULT 1202

ABC39733
 ID ABC39733 standard; DNA; 13 BP.

XX ABC39733;

XX 20-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 39750 for detecting SNP TSC0012139.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB000713.

XX 07-APR-2000; 2000DE-01019173.

XX (EPIG-) EPIGENOMICS AG.

XX Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.

PS Claim 1; SEQ ID NO 39750; 29pp + Sequence Listing; German.

CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

SQ Sequence 13 BP; 3 A; 4 C; 0 G; 6 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 921 TTGCGCTTTATCC 933
 ||| ||||| |||||
 Db 1 TTACCTTATATCC 13

RESULT 1203

ABF69854

ID ABF69854 standard; DNA; 13 BP.

XX

AC ABF69854;

KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 OS WO200177384-A2.
 PN 18-OCT-2001.
 PD 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 PA Olek A, Piepenbrock C, Berlin K;
 PI WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 246397; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX SQ Sequence 13 BP; 7 A; 0 C; 2 G; 4 T; 0 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 950 TAATGTATCGCTA 962
 Db 13 TAATTTATCTCTA 1
 RESULT 1210
 ABH46789
 ID ABH46789 standard; DNA; 13 BP.
 XX AC ABH46789;
 XX 22-FEB-2002 (first entry)
 XX Oligonucleotide SEQ ID NO 246766 for detecting SNP TSC0060313.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 OS WO200177384-A2.
 PN 18-OCT-2001.
 PD 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 PA Olek A, Piepenbrock C, Berlin K;
 PI WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 167026; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX SQ Sequence 13 BP; 8 A; 3 C; 1 G; 1 T; 0 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 909 TTTCCTTGGTCTT 921
 Db 13 TTTCCTTGGTATT 1
 RESULT 1209
 BH46420/c
 ID ABH46420 standard; DNA; 13 BP.
 XX X ABH46420;
 XX 22-FEB-2002 (first entry)
 XX Oligonucleotide SEQ ID NO 246397 for detecting SNP TSC0060214.

XX (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 PI WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 246766; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX SQ Sequence 13 BP; 3 A; 3 C; 0 G; 7 T; 0 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 919 CTTTGCCCTTTAT 931
 DQ 1 CTTTACCTTAT 13
 RESULT 1211
 ABC93198/c
 ID ABC93198 standard; DNA; 13 BP.
 AC ABC93198;
 XX 21-FEB-2002 (first entry)
 DT Oligonucleotide SEQ ID NO 93215 for detecting SNP TSC0023294.
 DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 OS WO200177384-A2.
 PN 18-OCT-2001.
 PD 06-APR-2001; 2001WO-IB000713.
 PF 07-APR-2000; 2000DE-01019173.
 PR (EPIG-) EPIGENOMICS AG.
 PA Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 93215; 29pp + Sequence Listing; German.

CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX SQ Sequence 13 BP; 4 A; 0 C; 7 G; 2 T; 0 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 928 TTATCCCTCCCTCT 940
 DQ 13 TTATCCCAACCCT 1
 RESULT 1212
 ABC19416
 ID ABC19416 standard; DNA; 13 BP.
 AC ABC19416;
 XX 20-FEB-2002 (first entry)
 DT Oligonucleotide SEQ ID NO 19433 for detecting SNP TSC0004044.
 DE SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 OS WO200177384-A2.
 PN 18-OCT-2001.
 PD 06-APR-2001; 2001WO-IB000713.
 PF 07-APR-2000; 2000DE-01019173.
 PR (EPIG-) EPIGENOMICS AG.
 PA Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 19433; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX

```
Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;
Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

940 TTCATTGGCTTTAA 952
||| ||||| |||||
1 TTAGTTGGTTTAA 13

SULT 1213
BC70861 standard; DNA; 13 BP.
ABC20175;
20-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 20192 for detecting SNP TSC0004139.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 20192; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC000010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 4 A; 2 C; 0 G; 7 T; 0 U; 0 Other;
Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

941 TCATTGGCTTTAA 953
||| ||||| |||||
1 TCATTGGCTTTAA 13

SULT 1214
BC70861/C
```

```
ID XX ABC70861 standard; DNA; 13 BP.
XX AC ABC70861;
XX DT 21-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 70878 for detecting SNP TSC0018401.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX PS Claim 1; SEQ ID NO 70878; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC000010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 10 A; 3 C; 0 G; 0 T; 0 U; 0 Other;
Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 911 TCATTGGCTTTTG 923
||| ||||| |||||
Db 13 TTTTGGCTTTTG 1

RESULT 1215
ABC73532
ID ABC73532 standard; DNA; 13 BP.
XX AC ABC73532;
XX DT 21-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 73549 for detecting SNP TSC0018945.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
```

XX PN WO200177384-A2.
 XX PD 18-OCT-2001.
 XX PE 06-APR-2001; 2001WO-IB000713.
 XX PF 07-APR-2000; 2000DE-01019173.
 XX PG (EPIG-) EPIGENOMICS AG.
 XX PH Olek A, Piepenbrock C, Berlin K;
 XX PI WPI; 2001-657177/75.
 XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 XX PU designed to detect single-nucleotide polymorphisms and cytosine
 XX PV methylation status.
 XX PS Claim 1; SEQ ID NO 73549; 29pp + Sequence Listing; German.
 XX SQ This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF0010-ABF9989, ABH0010-ABH9989 and ABH0010-ABH82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX SQ Sequence 13 BP; 1 A; 0 C; 2 G; 10 T; 0 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 905 TCATTTCCTTGG 917
 Db 1 TTATTTTTCCTTGG 13
 RESULT 1216
 ABC73533/c
 ID ABC73533 standard; DNA; 13 BP.
 XX AC ABC73533;
 XX DT 21-FEB-2002 (first entry)
 XX DE Oligonucleotide SEQ ID NO 73550 for detecting SNP TSC0018945.
 XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX OS Homo sapiens.
 XX PN WO200177384-A2.
 XX PD 18-OCT-2001.
 XX PE 06-APR-2001; 2001WO-IB000713.
 XX PF 07-APR-2000; 2000DE-01019173.
 XX PG (EPIG-) EPIGENOMICS AG.
 XX PH Olek A, Piepenbrock C, Berlin K;
 XX PI WPI; 2001-657177/75.
 XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 XX PU designed to detect single-nucleotide polymorphisms and cytosine
 XX PV methylation status.
 XX PS Claim 1; SEQ ID NO 73549; 29pp + Sequence Listing; German.
 XX SQ This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF0010-ABF9989, ABH0010-ABH9989 and ABH0010-ABH82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX SQ Sequence 13 BP; 1 A; 0 C; 2 G; 10 T; 0 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 905 TCATTTCCTTGG 917
 Db 1 TTATTTTTCCTTGG 13
 RESULT 1216
 ABC73533/c
 ID ABC73533 standard; DNA; 13 BP.
 XX AC ABC73533;
 XX DT 21-FEB-2002 (first entry)
 XX DE Oligonucleotide SEQ ID NO 73550 for detecting SNP TSC0018945.
 XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX OS Homo sapiens.
 XX PN WO200177384-A2.
 XX PD 18-OCT-2001.
 XX PE 06-APR-2001; 2001WO-IB000713.
 XX PF 07-APR-2000; 2000DE-01019173.
 XX PG (EPIG-) EPIGENOMICS AG.
 XX PH Olek A, Piepenbrock C, Berlin K;
 XX PI WPI; 2001-657177/75.
 XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 XX PU designed to detect single-nucleotide polymorphisms and cytosine
 XX PV methylation status.
 XX PS Claim 1; SEQ ID NO 73549; 29pp + Sequence Listing; German.
 XX SQ This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF0010-ABF9989, ABH0010-ABH9989 and ABH0010-ABH82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX SQ Sequence 13 BP; 1 A; 0 C; 2 G; 10 T; 0 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 905 TCATTTCCTTGG 917
 Db 1 TTATTTTTCCTTGG 13
 RESULT 1216
 ABC73533/c
 ID ABC73533 standard; DNA; 13 BP.
 XX AC ABC73533;
 XX DT 21-FEB-2002 (first entry)
 XX DE Oligonucleotide SEQ ID NO 73550 for detecting SNP TSC0018945.
 XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX OS Homo sapiens.
 XX PN WO200177384-A2.
 XX PD 18-OCT-2001.
 XX PE 06-APR-2001; 2001WO-IB000713.
 XX PF 07-APR-2000; 2000DE-01019173.
 XX PG (EPIG-) EPIGENOMICS AG.
 XX PH Olek A, Piepenbrock C, Berlin K;
 XX PI WPI; 2001-657177/75.
 XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 XX PU designed to detect single-nucleotide polymorphisms and cytosine
 XX PV methylation status.
 XX PS Claim 1; SEQ ID NO 73549; 29pp + Sequence Listing; German.
 XX SQ This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF0010-ABF9989, ABH0010-ABH9989 and ABH0010-ABH82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX SQ Sequence 13 BP; 1 A; 0 C; 2 G; 10 T; 0 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 905 TCATTTCCTTGG 917
 Db 1 TTATTTTTCCTTGG 13
 RESULT 1217
 ABC73891/c
 ID ABC73891 standard; DNA; 13 BP.
 XX AC ABC73891;
 XX DT 21-FEB-2002 (first entry)
 XX DE Oligonucleotide SEQ ID NO 73908 for detecting SNP TSC0019023.
 XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX OS Homo sapiens.
 XX PN WO200177384-A2.
 XX PD 18-OCT-2001.
 XX PE 06-APR-2001; 2001WO-IB000713.
 XX PF 07-APR-2000; 2000DE-01019173.
 XX PG (EPIG-) EPIGENOMICS AG.
 XX PH Olek A, Piepenbrock C, Berlin K;
 XX PI WPI; 2001-657177/75.
 XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 XX PU designed to detect single-nucleotide polymorphisms and cytosine
 XX PV methylation status.
 XX PS Claim 1; SEQ ID NO 73908; 29pp + Sequence Listing; German.
 XX SQ This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,

DR WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 73550; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF0010-ABF9989, ABH0010-ABH9989 and ABH0010-ABH82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX SQ Sequence 13 BP; 10 A; 2 C; 0 G; 1 T; 0 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 905 TCATTTCCTTGG 917
 Db 13 TTATTTTTCCTTGG 1
 RESULT 1217
 ABC73891/c
 ID ABC73891 standard; DNA; 13 BP.
 XX AC ABC73891;
 XX DT 21-FEB-2002 (first entry)
 XX DE Oligonucleotide SEQ ID NO 73908 for detecting SNP TSC0019023.
 XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX OS Homo sapiens.
 XX PN WO200177384-A2.
 XX PD 18-OCT-2001.
 XX PE 06-APR-2001; 2001WO-IB000713.
 XX PF 07-APR-2000; 2000DE-01019173.
 XX PG (EPIG-) EPIGENOMICS AG.
 XX PH Olek A, Piepenbrock C, Berlin K;
 XX PI WPI; 2001-657177/75.
 XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 XX PU designed to detect single-nucleotide polymorphisms and cytosine
 XX PV methylation status.
 XX PS Claim 1; SEQ ID NO 73908; 29pp + Sequence Listing; German.
 XX SQ This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,

central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 11 A; 2 C; 0 G; 0 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

909 TTCTTTGGTCTT 921

13 TTTTCTTGGTTT 1

RESULT 1218

ABF00942/c

ABF00942 standard; DNA; 13 BP.

ABF00942;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 100939 for detecting SNP TSC0025123.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 100939; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 4 A; 0 C; 8 G; 1 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 932 CCTCTCTCTTCAT 944

Db 13 CCTCCACTTCT 1

RESULT 1219

ABF00943

ID ABF00943 standard; DNA; 13 BP.

AC ABF00943;

DT 21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 100940 for detecting SNP TSC0025123.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 100940; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 1 A; 8 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 932 CCTCTCTCTTCAT 944

Db 1 CCTCCACTTCT 13

RESULT 1220

ABC54453/c

ID ABC54453 standard; DNA; 13 BP.

AC ABC54453;

DT 21-FEB-2002 (first entry)

```

XX DE Oligonucleotide SEQ ID NO 54470 for detecting SNP TSC0014932.
XX XX
XX XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX XX
XX OS Homo sapiens.
XX XX
XX PN WO200177384-A2.
XX XX
XX PD 18-OCT-2001.
XX XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX XX
XX PR 07-APR-2000; 2000DE-01019173.
XX XX
XX PA (EPIG-) EPIGENOMICS AG.
XX XX
XX PI Olek A, Piepenbrock C, Berlin K;
XX XX
XX DR WPI; 2001-657177/75.
XX XX
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX XX
XX PS Claim 1; SEQ ID NO 54470; 29pp + Sequence Listing; German.
XX XX
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX XX
XX SQ Sequence 13 BP; 7 A; 1 C; 0 G; 5 T; 0 U; 0 Other;
XX XX
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Q/ 941 TCATTGTTTAAAT 953
Db | | | | | | | | | |
13 TAATTGATTAAAT 1

RESULT 1221
ABC31867/c
ID ABC31867 standard; DNA; 13 BP.
XX
XX AC ABC31867;
XX XX
XX DT 20-FEB-2002 (first entry)
XX XX
XX DE Oligonucleotide SEQ ID NO 31884 for detecting SNP TSC0009927.
XX XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX XX
XX OS Homo sapiens.
XX XX
XX PN WO200177384-A2.
XX XX
XX PD 18-OCT-2001.
XX XX
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.

```

```

PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
XX DR WPI; 2001-657177/75.
XX
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX XX
XX PS Claim 1; SEQ ID NO 31884; 29pp + Sequence Listing; German.
XX XX
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX XX
XX SQ Sequence 13 BP; 9 A; 3 C; 0 G; 1 T; 0 U; 0 Other;
XX XX
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Q/ 909 TTCTCTTGGTCTT 921
Db | | | | | | | | | |
13 TTTATTTGGTGT 1

RESULT 1222
ABC07557
ID ABC07557 standard; DNA; 13 BP.
XX
XX AC ABC07557;
XX XX
XX DT 20-FEB-2002 (first entry)
XX XX
XX DE Oligonucleotide SEQ ID NO 7548 for detecting SNP TSC0002177.
XX XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX XX
XX OS Homo sapiens.
XX XX
XX PN WO200177384-A2.
XX XX
XX PD 18-OCT-2001.
XX XX
XX PF 06-APR-2001; 2001WO-IB000713.
XX XX
XX PR 07-APR-2000; 2000DE-01019173.
XX XX
XX PA (EPIG-) EPIGENOMICS AG.
XX XX
XX PI Olek A, Piepenbrock C, Berlin K;
XX XX
XX DR WPI; 2001-657177/75.
XX XX
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.

```

Claim 1; SEQ ID NO 7548; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 4 A; 5 C; 1 G; 3 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

955 TATCGCTACCAAC 967

1 TCTCGCTACCAAC 13

RESULT 1223

ABC59211/c
ABC59211 standard; DNA; 13 BP.

ABC59211;

21-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 59228 for detecting SNP TSC0015869.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 59228; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but

CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

SQ Sequence 13 BP; 9 A; 2 C; 0 G; 2 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 941 TCATGGTTTAAAT 953

13 TTATGGTTTAT 1

RESULT 1224

ABC12390

ID ABC12390 standard; DNA; 13 BP.

AC ABC12390;

DT 20-FEB-2002 (first entry)

DE Oligonucleotide SEQ ID NO 12397 for detecting SNP TSC0002937.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 12397; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 0 A; 0 C; 2 G; 11 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 910 TTCTTTGGTCTTT 922

1 TTTTGGTCTTT 13


```

RESULT 1225
ABF27949
ID ABF27949 standard; DNA; 13 BP.
XX
XX
AC ABF27949;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 127946 for detecting SNP TSC0032026.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 127946 for detecting SNP TSC0032026.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 127946; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 13 BP; 1 A; 6 C; 0 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 932 CCTCTCTTTCAT 944
XX ||||| |||
XX 1 CCTCTCTTTCCTT 13
XX
XX RESULT 1226
ABF39538
ID ABF39538 standard; DNA; 13 BP.
XX
XX
XX ABF39538;
XX
XX 21-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 139535 for detecting SNP TSC0034938.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 127946; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 13 BP; 1 A; 6 C; 0 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 932 CCTCTCTTTCAT 944
XX ||||| |||
XX 1 CCTCTCTTTCCTT 13
XX
XX RESULT 1227
ABF96259
ID ABF96259 standard; DNA; 13 BP.
XX
XX
XX ABF96259;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 196256 for detecting SNP TSC0048296.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.

```

```

KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 139535; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 944 TTGTTTAAATGTA 956
XX ||||| |||
XX 1 TTGATTTAGTGA 13
XX
XX RESULT 1227
ABF96259
ID ABF96259 standard; DNA; 13 BP.
XX
XX
XX ABF96259;
XX
XX 22-FEB-2002 (first entry)
XX
XX Oligonucleotide SEQ ID NO 196256 for detecting SNP TSC0048296.
XX
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.

```

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 196256; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 0 A; 6 C; 0 G; 7 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

926 TTTTATCCCTCCT 938
|||||
1 TTTTTCCTCCCT 13

RESULT 1228

3H21400/C
ABH21400 standard; DNA; 13 BP.

ABH21400;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 221377 for detecting SNP TSC0053879.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 221377; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 6 A; 0 C; 7 G; 0 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

928 TTTATCCCTCCTCT 940
|||||
13 TTTTCCCTCCCT 1

RESULT 1229

ABH25678
ID ABH25678 standard; DNA; 13 BP.

ABH25678;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 225655 for detecting SNP TSC0055005.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 225655; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 4 A; 0 C; 1 G; 8 T; 0 U; 0 Other;

```

Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 944 TTGGTTTAATGTA 956
DB 1 TTTGTTTAATATA 13

RESULT 1230
ABF78387/c
ID ABF78387 standard; DNA; 13 BP.
XX
AC ABF78387;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 178384 for detecting SNP TSC0009992.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
XX
Claim 1; SEQ ID NO 178384; 29pp + Sequence Listing; German.
XX
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
XX
Sequence 13 BP; 8 A; 3 C; 1 G; 1 T; 0 U; 0 Other;
XX
Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 918 TCATTGCGTTTAA 930
DB 13 TGTTCGCTTTTA 1

RESULT 1231
ABF81688/c
ID ABF81688 standard; DNA; 13 BP.
XX

Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 909 TTTCTTTGGTCTT 921
DB 13 TTTCTTTTCTT 1

RESULT 1232
ABF81887/c
ID ABF81887 standard; DNA; 13 BP.
XX
AC ABF81887;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 181884 for detecting SNP TSC0044958.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.

```

```

AC ABF81688;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 181685 for detecting SNP TSC0044924.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
XX
Claim 1; SEQ ID NO 181685; 29pp + Sequence Listing; German.
XX
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
XX
Sequence 13 BP; 11 A; 0 C; 2 G; 0 T; 0 U; 0 Other;
XX
Query Match      13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 909 TTTCTTTGGTCTT 921
DB 13 TTTCTTTTCTT 1

RESULT 1232
ABF81887/c
ID ABF81887 standard; DNA; 13 BP.
XX
AC ABF81887;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 181884 for detecting SNP TSC0044958.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.

```

18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 181884; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences
Sequence 13 BP; 11 A; 2 C; 0 G; 0 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
908 TTTTCTTTGGTCT 920
13 TTTTCTTTGGTCT 1
RESULT 1233
3F57604
ABF57604 standard; DNA; 13 BP.
ABF57604;
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 157601 for detecting SNP TSC0039698.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.

PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX Claim 1; SEQ ID NO 157601; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 4 A; 0 C; 2 G; 7 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
943 ATTGCTTTAATGT 955
1 ATTGCTAATAATTT 13
Db
RESULT 1234
ABH35194/C
ID ABH35194 standard; DNA; 13 BP.
XX
AC ABH35194;
XX
XX 22-FEB-2002 (first entry)
XX Oligonucleotide SEQ ID NO 235171 for detecting SNP TSC0057429.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 235171; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABF99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 4 A; 0 C; 2 G; 7 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
943 ATTGCTTTAATGT 955
1 ATTGCTAATAATTT 13
Db
RESULT 1234
ABH35194/C
ID ABH35194 standard; DNA; 13 BP.
XX
AC ABH35194;
XX
XX 22-FEB-2002 (first entry)
XX Oligonucleotide SEQ ID NO 235171 for detecting SNP TSC0057429.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 235171; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010

CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 13 BP; 9 A; 0 C; 4 G; 0 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 926 TTTTATCCCTCCT 938
 ||||| |||||
 Db 13 TTTTTCCTCCT 1

RESULT 1235
 ABF85490
 ID ABF85490 standard; DNA; 13 BP.

XX AC ABF85490;

XX DT 22-FEB-2002 (first entry)

XX DE Oligonucleotide SEQ ID NO 185487 for detecting SNP TSC0001628.

XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX CS Homo sapiens.

XX EN WO200177384-A2.

XX PD 18-OCT-2001.

XX PF 06-APR-2001; 2001WO-IB000713.

XX PR 07-APR-2000; 2000DE-01019173.

XX PA (EPIG-) EPIGENOMICS AG.

XX PI Olek A, Piepenbrock C, Berlin K;

XX PR WPI; 2001-657177/75.

XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 XX designed to detect single-nucleotide polymorphisms and cytosine
 XX methylation status.

XX PS Claim 1; SEQ ID NO 185487; 29pp + Sequence Listing; German.

XX CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 13 BP; 5 A; 0 C; 2 G; 6 T; 0 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 944 TTGTTTAAATGTA 956

Db 1 TAGGTTTAAATATA 13

RESULT 1236
 ABF61761/c
 ID ABF61761 standard; DNA; 13 BP.

XX AC ABF61761;

XX DT 22-FEB-2002 (first entry)

XX DE Oligonucleotide SEQ ID NO 161758 for detecting SNP TSC0040719.

XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 XX central nervous system; gastrointestinal; respiratory; immune; metabolic.

XX OS Homo sapiens.

XX PN WO200177384-A2.

XX PD 18-OCT-2001.

XX PF 06-APR-2001; 2001WO-IB000713.

XX PR 07-APR-2000; 2000DE-01019173.

XX PA (EPIG-) EPIGENOMICS AG.

XX PI Olek A, Piepenbrock C, Berlin K;

XX DR WPI; 2001-657177/75.

XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
 XX designed to detect single-nucleotide polymorphisms and cytosine
 XX methylation status.

XX PS Claim 1; SEQ ID NO 161758; 29pp + Sequence Listing; German.

XX CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences

XX SQ Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 947 GTTTAATGTATCG 959

Db 13 GTTTAATGTATAG 1

RESULT 1237
 ABF62878/c
 ID ABF62878 standard; DNA; 13 BP.

XX AC ABF62878;

XX DT 22-FEB-2002 (first entry)

XX DE Oligonucleotide SEQ ID NO 162875 for detecting SNP TSC0040950.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.

Claim 1; SEQ ID NO 162875; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 3 A; 0 C; 9 G; 1 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

932 CCTCTCTCTCAT 944

|||||
13 CCTCTCTCTCAT 1

33ULT 1238

3F91291

ABF91291 standard; DNA; 13 BP.

ABF91291;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 191288 for detecting SNP TSC0047057.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.

Claim 1; SEQ ID NO 191288; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 1 A; 4 C; 0 G; 8 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

922 TGCCTTTTATCC 934

|||||
1 TTCTTTTATCC 13

RESULT 1239

ABH42480

ID ABH42480 standard; DNA; 13 BP.

ABH42480;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 242457 for detecting SNP TSC0059123.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.

Claim 1; SEQ ID NO 242457; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. The
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX

XX Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 U; 0 Other;
SQ

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 941 TCATTGGTTTAA 953
Db 1 TAATTGGTTTAT 13

RESULT 1240
ABH43380
ID ABH43380 standard; DNA; 13 BP.
XX
AC ABH43380;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 243357 for detecting SNP TSC0059367.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
CS Homo sapiens.
XX
FN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 243357; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. The
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX

XX Sequence 13 BP; 3 A; 0 C; 1 G; 9 T; 0 U; 0 Other;
SQ

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 940 TTCATTGGTTTAA 952
Db 1 TTTATTGTTTAA 13

RESULT 1241
ABH63368
ID ABH63368 standard; DNA; 13 BP.
XX
AC ABH63368;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 263345 for detecting SNP TSC0063861.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
CS Homo sapiens.
XX
FN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 263345; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. The
CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX

XX Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 U; 0 Other;
SQ

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 944 TTGGTTTAAATGTA 956
Db 1 TTAGTTTAAATGTA 13

RESULT 1242

C95909
 ABC95909 standard; DNA; 13 BP.
 ABC95909;
 21-FEB-2002 (first entry)
 Oligonucleotide SEQ ID NO 95926 for detecting SNP TSC0023860.
 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 central nervous system; gastrointestinal; respiratory; immune; metabolic.
 Homo sapiens.
 WO200177384-A2.
 18-OCT-2001.
 06-APR-2001; 2001WO-IB000713.
 07-APR-2000; 2000DE-01019173.
 (EPIG-) EPIGENOMICS AG.
 Olek A, Piepenbrock C, Berlin K;
 WPI; 2001-657177/75.
 Set of oligonucleotides, useful for diagnosis and cell typing, is
 designed to detect single-nucleotide polymorphisms and cytosine
 methylation status.
 Claim 1; SEQ ID NO 95926; 29pp + Sequence Listing; German.
 This invention describes novel oligonucleotide primers or peptide nucleic
 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 and cytosine methylation status in chemically pretreated genomic DNA. The
 oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 range of diseases including immune system, gastrointestinal, respiratory,
 central nervous system, cardiovascular and metabolic disorders. The
 oligomers are also used for detecting cell type differentiation. ABC00010
 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 represent the oligomers described in the invention. NOTE: The sequence
 data for this patent did not form part of the printed specification, but
 was obtained in electronic format from WIPO at
 ftp.wipo.int/pub/published_pct_sequences
 Sequence 13 BP; 5 A; 4 C; 1 G; 3 T; 0 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 953 TGTATGCTACCA 965
 1 TATACGCTACCA 13
 RESULT 1243
 BC53412
 ABC53412 standard; DNA; 13 BP.
 ABC53412;
 21-FEB-2002 (first entry)
 Oligonucleotide SEQ ID NO 53429 for detecting SNP TSC0014750.
 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 central nervous system; gastrointestinal; respiratory; immune; metabolic.

OS Homo sapiens.
 XX WO200177384-A2.
 PN
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;
 XX
 DR WPI; 2001-657177/75.
 XX
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX
 XX Claim 1; SEQ ID NO 53429; 29pp + Sequence Listing; German.
 XX
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 XX Sequence 13 BP; 5 A; 0 C; 2 G; 6 T; 0 U; 0 Other;
 SQ
 Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 940 TTCATTGGTTTAA 952
 1 TTAATGTTTAA 13
 Db
 RESULT 1244
 ABF06600/c
 ID ABF06600 standard; DNA; 13 BP.
 XX
 AC ABF06600;
 XX
 XX 21-FEB-2002 (first entry)
 DT
 XX Oligonucleotide SEQ ID NO 106597 for detecting SNP TSC0026700.
 XX
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 XX WO200177384-A2.
 PN
 XX
 PD 18-OCT-2001.
 XX
 PF 06-APR-2001; 2001WO-IB000713.
 XX
 PR 07-APR-2000; 2000DE-01019173.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Olek A, Piepenbrock C, Berlin K;

XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 106597; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX Sequence 13 BP; 5 A; 0 C; 5 G; 3 T; 0 U; 0 Other;
 SQ
 Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 953 TGTATCGCTACCA 965
 Db 13 TTTATCCCTACCA 1
 RESULT 1245
 ABC32799
 ID ABC32799 standard; DNA; 13 BP.
 AC ABC32799;
 XX 20-FEB-2002 (first entry)
 DE Oligonucleotide SEQ ID NO 32816 for detecting SNP TSC0010303.
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 CS
 XX WO200177384-A2.
 XX 18-OCT-2001.
 PD 06-APR-2001; 2001WO-IB000713.
 PF 07-APR-2000; 2000DE-01019173.
 PR (EPIG-) EPIGENOMICS AG.
 PA Olek A, Piepenbrock C, Berlin K;
 PI WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 32816; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a

CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX Sequence 13 BP; 1 A; 6 C; 0 G; 6 T; 0 U; 0 Other;
 SQ
 Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 933 CCTCTCTTTCATT 945
 Db 1 CCTCTCTTTCATT 13
 RESULT 1246
 ABC11015
 ID ABC11015 standard; DNA; 13 BP.
 AC ABC11015;
 XX 20-FEB-2002 (first entry)
 DE Oligonucleotide SEQ ID NO 11006 for detecting SNP TSC0002724.
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 CS
 XX WO200177384-A2.
 XX 18-OCT-2001.
 PD 06-APR-2001; 2001WO-IB000713.
 PF 07-APR-2000; 2000DE-01019173.
 PR (EPIG-) EPIGENOMICS AG.
 PA Olek A, Piepenbrock C, Berlin K;
 PI WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 11006; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX Sequence 13 BP; 1 A; 5 C; 0 G; 7 T; 0 U; 0 Other;
 SQ
 Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;

```

Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

920 TTTCCTTTTATC 932
    ||| ||| |||
    1 TTTCCTTTCTATC 13

RESULT 1247
ABCF15150/c
ABC85460 standard; DNA; 13 BP.
ABC85460;
21-FEB-2002 (first entry)
Oligonucleotide SEQ ID NO 85477 for detecting SNP TSC0021481.
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.
Homo sapiens.
WO200177384-A2.
18-OCT-2001.
06-APR-2001; 2001WO-IB000713.
07-APR-2000; 2000DE-01019173.
(EPIG-) EPIGENOMICS AG.
Olek A, Piepenbrock C, Berlin K;
WPI; 2001-657177/75.
Set of oligonucleotides, useful for diagnosis and cell typing, is
designed to detect single-nucleotide polymorphisms and cytosine
methylation status.
Claim 1; SEQ ID NO 85477; 29pp + Sequence Listing; German.
This invention describes novel oligonucleotide primers or peptide nucleic
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
and cytosine methylation status in chemically pretreated genomic DNA. The
oligonucleotides are used for diagnosis and/or prognosis of cancer and a
range of diseases including immune system, gastrointestinal, respiratory,
central nervous system, cardiovascular and metabolic disorders. The
oligonucleotides are also used for detecting cell type differentiation. ABC00010
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
represent the oligomers described in the invention. NOTE: The sequence
data for this patent did not form part of the printed specification, but
was obtained in electronic format from WIPO at
ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 6 A; 0 C; 4 G; 3 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

928 TTATCCCTCTCT 940
    ||| ||| |||
    13 TTATCCCTACTAT 1

RESULT 1248
ABC38990
ABC38990 standard; DNA; 13 BP.
ABC38990;
X
```

```

DT 20-FEB-2002 (first entry)
XX Oligonucleotide SEQ ID NO 39007 for detecting SNP TSC0011996.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX 06-APR-2001; 2001WO-IB000713.
XX 07-APR-2000; 2000DE-01019173.
XX (EPIG-) EPIGENOMICS AG.
XX Olek A, Piepenbrock C, Berlin K;
XX WPI; 2001-657177/75.
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX Claim 1; SEQ ID NO 39007; 29pp + Sequence Listing; German.
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 1 A; 0 C; 3 G; 9 T; 0 U; 0 Other;
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 905 TCATTTTCTTTGG 917
DB 1 TTATTTTGTGG 13

RESULT 1249
ABCF15150/c
ID ABF15150 standard; DNA; 13 BP.
XX
XX ABCF15150;
XX 21-FEB-2002 (first entry)
XX Oligonucleotide SEQ ID NO 115147 for detecting SNP TSC0028845.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX Homo sapiens.
XX WO200177384-A2.
XX 18-OCT-2001.
XX
```

XX 06-APR-2001; 2001WO-IB000713.
 XX 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 115147; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 XX Sequence 13 BP; 8 A; 0 C; 4 G; 1 T; 0 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 919 CTTTGCCCTTTAT 931
 Db 13 CTTTCCCTTTAT 1
 RESULT 1250
 ABF15151
 ID ABF15151 standard; DNA; 13 BP.
 AC ABF15151;
 XX 21-FEB-2002 (first entry)
 DE Oligonucleotide SEQ ID NO 115148 for detecting SNP TSC0028845.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 OS WO200177384-A2.
 PN 18-OCT-2001.
 PD 06-APR-2001; 2001WO-IB000713.
 PF 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 115147; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 XX Sequence 13 BP; 8 A; 0 C; 4 G; 1 T; 0 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 919 CTTTGCCCTTTAT 931
 Db 13 CTTTCCCTTTAT 1
 RESULT 1250
 ABF15151
 ID ABF15151 standard; DNA; 13 BP.
 AC ABF15151;
 XX 21-FEB-2002 (first entry)
 DE Oligonucleotide SEQ ID NO 115148 for detecting SNP TSC0028845.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 OS WO200177384-A2.
 PN 18-OCT-2001.
 PD 06-APR-2001; 2001WO-IB000713.
 PF 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.

PT methylation status.
 XX Claim 1; SEQ ID NO 115148; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 XX Sequence 13 BP; 1 A; 4 C; 0 G; 8 T; 0 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 919 CTTTGCCCTTTAT 931
 Db 1 CTTTCCCTTTAT 13
 RESULT 1251
 ABF29011/c
 ID ABF29011 standard; DNA; 13 BP.
 XX AC ABF29011;
 XX 21-FEB-2002 (first entry)
 DE Oligonucleotide SEQ ID NO 129008 for detecting SNP TSC0032298.
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.
 OS WO200177384-A2.
 PN 18-OCT-2001.
 PD 06-APR-2001; 2001WO-IB000713.
 PF 07-APR-2000; 2000DE-01019173.
 XX (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 XX Claim 1; SEQ ID NO 129008; 29pp + Sequence Listing; German.
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence

Mon Oct 18 14:40:13 2004

schultz1-899.rng

data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 8 A; 3 C; 0 G; 2 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

941 TCATTGGTTTAAAT 953
13 TTATTTGGTTTAACT 1

RESULT 1252
ABF33001
ID ABF33001 standard; DNA; 13 BP.
AC ABF33001;
XX
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 132998 for detecting SNP TSC0033182.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 132998; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 3 A; 5 C; 0 G; 5 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 931 TCCCTCTCTCTCA 943
DB 1 TCCCTCATATTCA 13

RESULT 1253

ABF37093/C
ID ABF37093 standard; DNA; 13 BP.
XX
XX
AC ABF37093;
XX
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 137090 for detecting SNP TSC0034252.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 137090; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 13 BP; 9 A; 3 C; 0 G; 1 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 903 GGTTCATTTTCTTT 915
DB 13 GGTTCATTTTCTTT 1

RESULT 1254

ABH21754/C
ID ABH21754 standard; DNA; 13 BP.
XX
XX
AC ABH21754;
XX
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 221731 for detecting SNP TSC0053965.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 OS Homo sapiens.
 PN WO200177384-A2.
 XX
 XX 18-OCT-2001.
 PD
 XX 06-APR-2001; 2001WO-IB000713.
 PF
 XX 07-APR-2000; 2000DE-01019173.
 PR
 XX (EPIG-) EPIGENOMICS AG.
 PA Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 DR
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 PS Claim 1; SEQ ID NO 221731; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 4 A; 0 C; 7 G; 2 T; 0 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 CY 924 CCTTTATCCCTC 936
 DB 13 CCTTTATCCCTC 1
 RESULT 1255
 ABF53571/c
 ID ABF53571 standard; DNA; 13 BP.
 AC ABF53571;
 XX
 XX 21-FEB-2002 (first entry)
 DT
 XX Oligonucleotide SEQ ID NO 153568 for detecting SNP TSC0038820.
 DE
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 OS Homo sapiens.
 XX
 XX WO200177384-A2.
 PV
 XX 18-OCT-2001.
 PJ
 XX 06-APR-2001; 2001WO-IB000713.
 PF
 XX 07-APR-2000; 2000DE-01019173.
 PR
 XX

PA (EPIG-) EPIGENOMICS AG.
 XX Olek A, Piepenbrock C, Berlin K;
 PI WPI; 2001-657177/75.
 DR
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 PS Claim 1; SEQ ID NO 153568; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 13 BP; 9 A; 2 C; 0 G; 2 T; 0 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 940 TTCATTGGTTAA 952
 DB 13 TTTTGTGGTTAA 1
 RESULT 1256
 ABH29805
 ID ABH29805 standard; DNA; 13 BP.
 XX
 XX ABH29805;
 AC
 XX 22-FEB-2002 (first entry)
 DT
 XX Oligonucleotide SEQ ID NO 229782 for detecting SNP TSC0056047.
 DE
 XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 OS Homo sapiens.
 XX
 XX WO200177384-A2.
 PN
 XX 18-OCT-2001.
 PD
 XX 06-APR-2001; 2001WO-IB000713.
 PF
 XX 07-APR-2000; 2000DE-01019173.
 PR
 XX (EPIG-) EPIGENOMICS AG.
 PA Olek A, Piepenbrock C, Berlin K;
 XX WPI; 2001-657177/75.
 DR
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 PS Claim 1; SEQ ID NO 229782; 29pp + Sequence Listing; German.
 XX
 CC This invention describes novel oligonucleotide primers or peptide nucleic

Mon Oct 18 14:40:13 2004

schultz1-899.rng

acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 1 A; 5 C; 0 G; 7 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

931 TCCCTCCCTTCA 943
1 TCCCTCCCTTCA 13

RESULT 1257
3H07557/C
ABH07557 standard; DNA; 13 BP.

ABH07557;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 207534 for detecting SNP TSC0004679.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 207534; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 8 A; 3 C; 0 G; 2 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 944 TTGTTTAAATGA 956
13 TTGTTTAAATGA 1

RESULT 1258
ABH12090
ID ABH12090 standard; DNA; 13 BP.

ABH12090;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 212067 for detecting SNP TSC0051683.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 212067; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 2 A; 0 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 904 GTGATTTCCTTG 916
1 GTGATTTCCTTG 13

RESULT 1259
ABH37737/C
ID ABH37737 standard; DNA; 13 BP.

XX ABH37737;
AC
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 237714 for detecting SNP TSC0057979.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
XX WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 237714; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 13 BP; 8 A; 3 C; 0 G; 2 T; 0 U; 0 Other;
XX
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 947 GTTTAAATGTCG 959
XX
XX Dd 13 GTTTAAATGTTTG 1
XX
XX RESULT 1260
XX ABF87619/c
XX ID ABF87619 standard; DNA; 13 BP.
XX
XX AC ABF87619;
XX
XX XX 22-FEB-2002 (first entry)
XX
XX DE Oligonucleotide SEQ ID NO 187616 for detecting SNP TSC0007370.
XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX OS Homo sapiens.
XX
XX XX

PN WO200177384-A2.
XX
XX 18-OCT-2001.
XX
XX 06-APR-2001; 2001WO-IB000713.
XX
XX 07-APR-2000; 2000DE-01019173.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2001-657177/75.
XX
XX Set of oligonucleotides, useful for diagnosis and cell typing, is
XX designed to detect single-nucleotide polymorphisms and cytosine
XX methylation status.
XX
XX Claim 1; SEQ ID NO 187616; 29pp + Sequence Listing; German.
XX
XX This invention describes novel oligonucleotide primers or peptide nucleic
XX acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX and cytosine methylation status in chemically pretreated genomic DNA. The
XX oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX range of diseases including immune system, gastrointestinal, respiratory,
XX central nervous system, cardiovascular and metabolic disorders. The
XX oligomers are also used for detecting cell type differentiation. ABC00010
XX -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
XX represent the oligomers described in the invention. NOTE: The sequence
XX data for this patent did not form part of the printed specification, but
XX was obtained in electronic format from WIPO at
XX ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 13 BP; 7 A; 2 C; 0 G; 4 T; 0 U; 0 Other;
XX
XX Query Match 13.4%; Score 9.8; DB 1; Length 13;
XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;
XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 940 TTCATTGCTTTAA 952
XX
XX Dd 13 TTGATTAGTTTAA 1
XX
XX RESULT 1261
XX ABF65507/c
XX ID ABF65507 standard; DNA; 13 BP.
XX
XX AC ABF65507;
XX
XX XX 22-FEB-2002 (first entry)
XX
XX DE Oligonucleotide SEQ ID NO 165504 for detecting SNP TSC0041502.
XX
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
XX OS Homo sapiens.
XX
XX XX WO200177384-A2.
XX
XX XX 18-OCT-2001.
XX
XX XX 06-APR-2001; 2001WO-IB000713.
XX
XX XX 07-APR-2000; 2000DE-01019173.
XX
XX XX (EPIG-) EPIGENOMICS AG.
XX
XX XX Olek A, Piepenbrock C, Berlin K;
XX
XX XX WPI; 2001-657177/75.
XX
XX DR

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 165504; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 6 A; 4 C; 1 G; 2 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

940 TTCATTGGTTAA 952
||| |||||
13 TTCGGTGGTTAA 1

RESULT 1262
BH43381/c
ID ABH43381 standard; DNA; 13 BP.

AC ABH43381;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 243358 for detecting SNP TSC0059367.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 243358; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The

oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 9 A; 1 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

940 TTCATTGGTTAA 952
||| |||||
13 TTTATTGGTTAA 1

RESULT 1263
ABH46788/c
ID ABH46788 standard; DNA; 13 BP.

AC ABH46788;

22-FEB-2002 (first entry)

Oligonucleotide SEQ ID NO 246765 for detecting SNP TSC0060313.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 246765; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010 -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 7 A; 0 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;


```

QY 919 CTTTGCTTTTAT 931
Db 13 CTTTACCTTATAT 1

RESULT 1264
ABH48134/C
ID ABH48134 standard; DNA; 13 BP.
XX AC ABH48134;
XX DT 22-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 248111 for detecting SNP TSC060637.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX PS Claim 1; SEQ ID NO 248111; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABG9989, ABF0010-ABF9989, ABH0010-ABH9989 and ABI0010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 6 A; 1 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 941 TCATTGCTTAAAT 953
Db 13 TCATTGCTTAAAT 1

RESULT 1265
ABH56629/C
ID ABH56629 standard; DNA; 13 BP.
XX AC ABH56629;
XX DT 22-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 258450 for detecting SNP TSC0062845.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.

```

```

DE Oligonucleotide SEQ ID NO 256606 for detecting SNP TSC0009817.
XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.
XX PR 07-APR-2000; 2000DE-01019173.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX DR WPI; 2001-657177/75.
XX PT Set of oligonucleotides, useful for diagnosis and cell typing, is
XX PT designed to detect single-nucleotide polymorphisms and cytosine
XX PT methylation status.
XX PS Claim 1; SEQ ID NO 256606; 29pp + Sequence Listing; German.
XX CC This invention describes novel oligonucleotide primers or peptide nucleic
XX CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
XX CC and cytosine methylation status in chemically pretreated genomic DNA. The
XX CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
XX CC range of diseases including immune system, gastrointestinal, respiratory,
XX CC central nervous system, cardiovascular and metabolic disorders. The
XX CC oligomers are also used for detecting cell type differentiation. ABC00010
XX CC -ABG9989, ABF0010-ABF9989, ABH0010-ABH9989 and ABI0010-ABI82073
XX CC represent the oligomers described in the invention. NOTE: The sequence
XX CC data for this patent did not form part of the printed specification, but
XX CC was obtained in electronic format from WIPO at
XX CC ftp.wipo.int/pub/published_pct_sequences
XX SQ Sequence 13 BP; 8 A; 2 C; 0 G; 3 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 1.1e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 940 TTCATTGCTTAA 952
Db 13 TTAATTGCTTTA 1

RESULT 1266
ABH58473
ID ABH58473 standard; DNA; 13 BP.
XX AC ABH58473;
XX DT 22-FEB-2002 (first entry)
XX DE Oligonucleotide SEQ ID NO 258450 for detecting SNP TSC0062845.
XX KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
XX KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
XX KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX OS Homo sapiens.
XX PN WO200177384-A2.
XX PD 18-OCT-2001.
XX PF 06-APR-2001; 2001WO-IB000713.

```

PS Claim 1; SEQ ID NO 266282; 29pp + Sequence Listing; German.

XX This invention describes novel oligonucleotide primers or peptide nucleic

CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

CC and cytosine methylation status in chemically pretreated genomic DNA. The

CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a

CC range of diseases including immune system, gastrointestinal, respiratory,

CC central nervous system, cardiovascular and metabolic disorders. The

CC oligomers are also used for detecting cell type differentiation. ABC00010

CC -ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073

CC represent the oligomers described in the invention. NOTE: The sequence

CC data for this patent did not form part of the printed specification, but

CC was obtained in electronic format from WIPO at

XX ftp.wipo.int/pub/published_pct_sequences

XX

XX Sequence 13 BP; 1 A; 5 C; 0 G; 7 T; 0 U; 0 Other;

XX

XX Query Match 13.4%; Score 9.8; DB 1; Length 13;

XX Best Local Similarity 84.6%; Pred. No. 1.1e+03;

XX Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

XX

XX QY 931 TCCTCTCTCTCA 943

XX Db 1 TCCTCTCTCTCA 13

XX

XX RESULT 1268

XX ABZ22350/c

XX ID ABZ22350 standard; DNA; 13 BP.

XX

XX AC ABZ22350;

XX

XX DT 21-MAR-2003 (first entry)

XX

XX DE Green fluorescent protein related PCR primer.

XX

XX KW Green fluorescent protein; GFP; plasmid; bacterial; recombinase A; recA;

XX plant; PCR primer; ss.

XX

XX OS Synthetic.

XX

XX PN KR2002027383-A.

XX

XX PD 13-APR-2002.

XX

XX PF 03-JAN-2002; 2002KR-00000218.

XX

XX PR 03-JAN-2002; 2002KR-00000218.

XX

XX PA (KORE-) KOREA RES INST BIOSCIENCE & BIOTECHNOLOG.

XX

XX PI Han SG, Jung SW, Jung WJ, Min SR, Yoo JR;

XX

XX DR WPI; 2002-747906/81.

XX

XX PT Transforming plasmid using bacterial recombinase a (reca).

XX

XX PS Example; Page 6; 11pp; Korean.

XX

XX The present invention describes a method for transforming a plasmid using

CC bacterial recombinase A (reca), and thereby increasing efficiency of the

CC homologous recombination to decrease the selection frequency for the

CC preparation of homoplasmies. The method for transforming the plasmid using

CC reca comprises: (a) preparing a reca expression vector for transforming

CC plant nuclei, containing the reca gene and plasmid targeting sequence;

CC (b) transforming a plant with the reca expression vector to prepare a

CC first nuclei transformed plant; (c) preparing a vector for transforming

CC plant plasmid, containing at least one desired gene and a selection

CC marker gene; and (d) transforming plasmid produced by the first nuclei

CC transformed plant with the vector for transforming plant plasmid to

CC prepare a second transformed plant, in which the selection marker is 16S

CC ribosome subunit having tolerance to spectinomycin or streptomycin,

CC protein having tolerance to spectinomycin or streptomycin, or enzyme such

CC

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Olek A, Piepenbrock C, Berlin K;

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is

designed to detect single-nucleotide polymorphisms and cytosine

methylation status.

Claim 1; SEQ ID NO 258450; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic

acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

and cytosine methylation status in chemically pretreated genomic DNA. The

oligonucleotides are used for diagnosis and/or prognosis of cancer and a

range of diseases including immune system, gastrointestinal, respiratory,

central nervous system, cardiovascular and metabolic disorders. The

oligomers are also used for detecting cell type differentiation. ABC00010

-ABG9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073

represent the oligomers described in the invention. NOTE: The sequence

data for this patent did not form part of the printed specification, but

was obtained in electronic format from WIPO at

ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 3 A; 2 C; 0 G; 8 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 13;

Best Local Similarity 84.6%; Pred. No. 1.1e+03;

Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Y 919 CTTTGCGCTTTAT 931

b 1 CTTTACTTTTAT 13

RESULT 1267

BH66305

D ABH66305 standard; DNA; 13 BP.

X

X C ABH66305;

X

X T 22-FEB-2002 (first entry)

X

X E Oligonucleotide SEQ ID NO 266282 for detecting SNP TSC0000410.

X

X W SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;

X peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;

X central nervous system; gastrointestinal; respiratory; immune; metabolic.

X

X S Homo sapiens.

X

X N WO200177384-A2.

X

X D 18-OCT-2001.

X

X F 06-APR-2001; 2001WO-IB0000713.

X

X R 07-APR-2000; 2000DE-01019173.

X

X A (EPIG-) EPIGENOMICS AG.

X

X I Olek A, Piepenbrock C, Berlin K;

X

X WPI; 2001-657177/75.

X

X Set of oligonucleotides, useful for diagnosis and cell typing, is

PT designed to detect single-nucleotide polymorphisms and cytosine

PT methylation status.

PT

as cytosine deaminase and HADH and/or GFP (green fluorescence protein).
 The present sequence represents a PCR primer for GFP which is used in the
 exemplification of the present invention

Sequence 13 BP; 6 A; 1 C; 4 G; 2 T; 0 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 84.6%; Pred. No. 1.1e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 926 TTTATCCCTCCT 938
 Db 13 TGTATACCTCCT 1

RESULT 1269
 ACD56505
 ID ACD56505 standard; RNA; 13 BP.
 XX
 AC ACD56505;
 XX
 DT 24-SEP-2003 (first entry)
 XX
 DE HBV enzymatic nucleic acid substrate sequence #186.
 XX
 KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
 KW RNA stability; RNA expression; RNA synthesis; antisense;
 KW enzymatic nucleic acid; hammerhead ribozyme; DNzyme; inozyme; zinzyme;
 KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;
 KW HBV reverse transcriptase; Enhancer I region; viral replication;
 KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
 KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
 KW virucide; antiinflammatory; substrate; ss.
 XX
 OS Hepatitis B virus.
 XX
 PN WO200281494-A1.
 XX
 PD 17-OCT-2002.
 XX
 PF 26-MAR-2002; 2002WO-US009187.
 XX
 PR 26-MAR-2001; 2001US-00817879.
 PR 08-JUN-2001; 2001US-00877478.
 PR 08-JUN-2001; 2001US-0296876P.
 PR 24-OCT-2001; 2001US-0335059P.
 PR 05-DEC-2001; 2001US-0337055P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 PA (BLAT/) BLATT L.
 PA (MACE/) MACEJAK D.
 PA (MCSW/) MCSWIGGEN J.
 PA (MORR/) MORRISSEY D.
 PA (PVC/) PAVCO P.
 PA (LEEP/) LEE P.
 PA (DRAP/) DRAPER K.
 PA (ROBE/) ROBERTS E.
 XX
 PI Blatt L, Macejak D, Mcswiggen J, Morrissey J, Pavco P, Lee P;
 PI Draper K, Roberts E;
 XX
 DR WPI; 2003-229207/22.
 XX
 PT Novel compound useful for treating cirrhosis, liver failure,
 PT hepatocellular carcinoma, or condition associated with hepatitis C virus
 PT infection.
 XX
 PS Example 1; Page 221; 387pp; English.
 XX
 CC The present invention relates to nucleic acid molecules which modulate
 CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
 CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
 CC and enzymatic nucleic acids such as hammerhead ribozymes, DNzymes,

CC inozymes, zinzymes, amberyne, and G-cleaver ribozymes. Also disclosed
 CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
 CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
 CC as oligonucleotides that specifically bind the Enhancer I region of HBV
 CC DNA. The nucleic acids may be used to modulate the expression of HBV
 CC genes and HBV viral replication. Also disclosed is a method for screening
 CC compounds and/or potential therapies directed against HBV, and compounds
 CC that modulate the expression and/or replication of HCV. The compounds and
 CC methods of the invention are useful for the treatment of degenerative and
 CC disease states related to HBV and HCV infection, replication and gene
 CC expression such as cirrhosis, liver failure, and hepatocellular
 CC carcinoma. The present sequence represents a substrate for one of the HBV
 CC enzymatic nucleic acid sequences disclosed in the present invention

XX
 SQ Sequence 13 BP; 0 A; 4 C; 3 G; 0 T; 6 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 13;
 Best Local Similarity 38.5%; Pred. No. 1.1e+03;
 Matches 5; Conservative 6; Mismatches 2; Indels 0; Gaps 0;

QY 917 GTCTTGGCCTTT 929
 Db 1 GUCUGGCCUUCU 13

RESULT 1270
 AAQ78380
 ID AAQ78380 standard; DNA; 14 BP.
 XX
 AC AAQ78380;
 XX
 DT 25-MAR-2003 (revised)
 DT 27-JUN-1995 (first entry)
 XX
 DE Antisense oligonucleotide hybridising to TGF-beta gene.
 XX
 KW Transforming growth factor beta; TGF-beta; antisense; treatment; tumour;
 KW angiogenesis; breast tumour; neurofibroma; glioma; glioblastoma;
 KW carcinogenesis; carcinoma; oesophagus; oesophageal; gastric; gut;
 KW immunosuppression; oligonucleotide; ss.
 XX
 OS Synthetic.
 XX
 PN WO9425588-A2.
 XX
 PD 10-NOV-1994.
 XX
 PF 29-APR-1994; 94WO-EP001362.
 XX
 PR 30-APR-1993; 93EP-00107089.
 PR 13-MAY-1993; 93EP-00107849.
 XX
 PA (BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.
 XX
 PI Schlingensiepen G, Brysch W, Schlingensiepen K, Schlingensiepen R;
 PI Bogdahn U;
 XX
 DR WPI; 1994-358266/44.
 XX
 PT New transforming growth factor beta antisense oligonucleotide(s) - for
 PT treating immunosuppression, tumours, etc.
 XX
 PS Claim 6; Page 32; 74pp; English.
 XX
 CC The antisense oligonucleotides are useful in the treatment of tumours in
 CC which expression of TGF-beta is of relevance for pathogenicity and/or
 CC inhibition of pathological angiogenesis. They are used especially for the
 CC treatment of the immunosuppressive effect of TGF-beta, augmentation of
 CC the proliferation of cytotoxic lymphocytes, treatment of endogenous
 CC hyperexpression of TGF-beta, treatment of breast tumours, neurofibromas
 CC and malignant gliomas, including glioblastomas, treatment and prophylaxis
 CC of skin carcinogenesis, and treatment of oesophageal and gastric
 CC carcinomas. See AAQ78352-Q78488. The sequences given in GENESEQ files

AAQ78352-Q78407 and AAQ78488 are antisense oligodeoxynucleotides of TGF-beta 1. The sequences given in GENSEQ files AAQ78408-78487 are antisense oligodeoxynucleotides of TGF-beta 2 in the form of phosphorothioate analogues. (Updated on 25-MAR-2003 to correct PN field.)

Sequence 14 BP; 1 A; 4 C; 3 G; 6 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 14;
Best Local Similarity 84.6%; Pred. No. 1.2e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

928 TTATCCCTCTCT 940
|||||
2 TTATCCCTCTCT 14

RESULT 1271
AA56923/c
D AAX56923 standard; DNA; 14 BP.

AA56923;
16-OCT-2003 (revised)
15-JUL-1999 (first entry)

3 HIV-1 proviral DNA fragment 6.

DNA-targeting conjugate; anticancer drug; viral DNA-cleaving agent;
viral DNA-binding agent; solid support; primer; ss.

Human immunodeficiency virus 1.

WO9531434-A1.

23-NOV-1995.

12-MAY-1995; 95WO-US006379.

13-MAY-1994; 94US-00242664.

(SLOK) SLOAN KETTERING INST CANCER RES.

(ZWI-) ZW BIOMEDICAL RES AG.

Watanabe KA, Ren W, Weil R;

WPI; 1996-010846/01.

Derivatised solid supports and reagents for oligonucleotide synthesis -
and new oligo:nucleotide phosphoramidate conjugates.

Disclosure; Page 43; 68pp; English.

This invention describes novel derivatised solid supports of formula S'-L
-Z-CH2CH2-R, where: S' = a solid support; L = a bond or an (in)organic
linker; Z = SO2 or S-S; R = OH, an H-phosphate, alkanephosphonate,
phosphotriester, phosphorothioate, phosphorothioate, phosphorothioate,
phosphorothioate, phosphorothioate, phosphorothioate, phosphorothioate,
an optionally substituted or modified nucleotide (N'), or an
oligonucleotide of formula (N')GR2; g = 1-200; R1 = a protecting group;
R2 = an H-phosphate, alkanephosphonate, phosphotriester, phosphate
triester, phosphate diester, phosphorothioate, phosphorothioate,
phosphoramidate or phosphoramidate group, OH, OR1, SR1 or
OP(OCH2CH2CN)OCH2CH2CH2CH2OR1. Also mentioned are compounds of formula
R3CH2CH2CH2CH2CH2R4, where: R3 = a protecting group; and R4 = OH or an H-
phosphate, alkanephosphonate, phosphotriester, phosphorothioate,
phosphorothioate, phosphorothioate, phosphorothioate, phosphorothioate,
or phosphoramidate group. Also claimed are new phosphoramidates, a
process for preparing an oligonucleotide 5'-phosphate, a process for
preparing a solid support useful for preparation of an oligonucleotide 3'-
phosphate, a process for preparing an oligonucleotide 3',5'-diphosphate. The
process for preparing an oligonucleotide 3',5'-diphosphate. The
oligonucleotide 3'- and/or 5'-phosphates may be used to prepare DNA-
targeting conjugates, e.g. with anticancer drugs or viral (e.g. HIV) DNA-

cleaving or -binding agents. The process for preparing oligonucleotide
3',5'-diphosphates is simple and suitable for use in automatic DNA
synthesizers. This sequence represents a fragment of the HIV-1 provirus
genome, used to describe the method of the invention. (Updated on 16-OCT-
2003 to standardise OS field)

Sequence 14 BP; 10 A; 0 C; 4 G; 0 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 14;
Best Local Similarity 84.6%; Pred. No. 1.2e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

919 CTTTCCCTTTAT 931
|||||
13 CTTTCCCTTTAT 1

RESULT 1272
AAT76230
ID AAT76230 standard; DNA; 14 BP.

AAT76230;

12-SEP-1997 (first entry)

Human IL5 receptor antisense oligonucleotide.

Asthma; airway epithelium; adenocarcinoma; cystic fibrosis;
chronic obstructive pulmonary disease; bronchitis; interleukin, ss.

Synthetic.

WO9640162-A1.

19-DEC-1996.

06-JUN-1996; 96WO-US009306.

07-JUN-1995; 95US-00474497.

(UYEC-) UNIV EAST CAROLINA.

Nyce JW, Metzger WJ;

WPI; 1997-051871/05.

Treatment of airway diseases such as asthma - by topically applying
adenosine-free antisense oligonucleotide to airway epithelium of
subject.

Example 5; Page 31; 71pp; English.

A method for treating airway disease in a subject has been produced,
which involves the topical administration of an essentially adenosine
free antisense oligonucleotide (ON) to the airway epithelium of the
subject. The present sequence is an antisense oligonucleotide specific
for the human IL5 receptor. The method can be used to treat airway
diseases such as cystic fibrosis, asthma, chronic obstructive pulmonary
disease, bronchitis and other airway diseases characterised by an
inflammatory response. By eliminating adenosine from the antisense ON,
its liberation upon antisense degradation is prevented, thereby
preventing adenosine-induced bronchoconstriction in patients with hyper-
reactive airways

Sequence 14 BP; 0 A; 4 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 14;
Best Local Similarity 84.6%; Pred. No. 1.2e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

909 TTTCTTGGTCTT 921
|||||
1 TTTCTTGGTCTT 13

AA33470
AAA33470 standard; DNA; 14 BP.
AA33470;
28-JUL-2000 (first entry)
Low adenosine antisense oligonucleotide SEQ ID NO:1159.
Human; adenosine receptor; low adenosine antisense oligonucleotide;
phosphorothioate; impaired respiration; inflammation; allergy;
allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
antiallergic; antiasthmatic; cytotatic; analgesic; impaired airway;
lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
respiratory distress syndrome; pain; cystic fibrosis; emphysema;
pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
Homo sapiens.
WO200009525-A2.
24-FEB-2000.
03-AUG-1999; 99WO-US017712.
03-AUG-1998; 98US-0095212P.
(UYEC-) UNIV EAST CAROLINA.
Nyce JW;
WPI; 2000-205971/18.
New antisense oligonucleotides useful for treating e.g. pulmonary
vasoconstriction, inflammation, allergies, asthma, hypertension,
bronchitis, emphysema, respiratory distress syndrome, ischemia or
cancers.
Claim 18; Page 410; 1343pp; English.
The present invention describes a new composition comprising an antisense
oligonucleotide (ON) with low adenosine (up to 15%), which targets
nucleic acids involved in bronchoconstriction, allergies, and/or
inflammation. The ON can have antiinflammatory, antiallergic,
antiasthmatic, cytotatic and analgesic activities. The compositions are
useful for the treatment of diseases associated with inflammation,
impaired airways, including lung disease and diseases whose secondary
effects afflict the lungs of a subject. They can be used for treating
e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
impaired respiration, respiratory distress syndrome, pain, cystic
fibrosis, pulmonary hypertension, emphysema, chronic obstructive
pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
carcinomas, and cancers which may metastasize to the lungs, including
breast and prostate cancer. The reduction of the adenosine content of
ONs reduces side effects. The A-containing ONs break down with the
release of deoxyadenosine which activates adenosine receptors causing
bronchoconstriction and inflammation. AAA33313 to AAA35312 represent the
nucleotide sequences given in the sequence listing from the present
invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
sequences are also called SEQ ID NO:1 to 185, but the sequences differ
from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to
AAA33992) are specifically claimed ONs from the present invention. N.B.
Sequences given in the disclosure of the present invention do not match
up with their corresponding SEQ ID NO: sequences given in the sequence
listing
Sequence 14 BP; 0 A; 4 C; 2 G; 8 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 14;
Best Local Similarity 84.6%; Pred. No. 1.2e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 909 TTTCTTTGCTCT 921
|| |||| ||||
Db 1 TTTCTTTGCTCT 13
RESULT 1276
AAF19592
ID AAF19592 standard; DNA; 14 BP.
XX
AC AAF19592;
XX
DT 14-MAR-2001 (first entry)
XX
DE Human IL5 receptor polynucleotide fragment #1159.
XX
KW Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
human; airway disorder; bronchoconstriction; lung inflammation;
surfactant depletion; respiratory; bronchodilator; antiinflammatory;
immunosuppressive; antiasthmatic; analgesic; hypotensive; cytotatic;
respiratory obstruction; pulmonary obstruction; impeded respiration;
surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
pulmonary hypertension; emphysema; pulmonary transplantation rejection;
chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
cancer; ss.
XX
OS Homo sapiens.
XX
PN WO2000062736-A2.
XX
PD 26-OCT-2000.
XX
PF 24-MAR-2000; 2000WO-US008020.
XX
PR 06-APR-1999; 99US-0127958P.
XX
PA (UYEC-) UNIV EAST CAROLINA.
PA (NYCE/) NYCE J.W.
XX
PI Nyce JW;
XX
DR WPI; 2000-679539/66.
XX
PT Low adenosine (A) content antisense oligonucleotides which do not trigger
adenosine receptors during metabolism, useful e.g. for treating cancers
and respiratory obstructions.
PT
XX
PS Claim 14; Page 209; 1592pp; English.
XX
CC The present invention describes low adenosine (A) content antisense
oligonucleotides and compositions (I) comprising them. In the antisense
oligonucleotides the A is replaced by a 'Universal' or alternative base.
CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
CC immunosuppressive, antiasthmatic, hypotensive and cytotatic activities.
CC The antisense oligonucleotides and (I) can be used to down-regulate the
CC expression and or activity of target polypeptides associated with
CC lung/respiratory disorders and malignancies, such as stimulating and
CC activating peptide factors and transmitters, transcription factors,
CC immunoglobulins and antibodies, antibody receptors, cytokines and
CC chemokines, endogenously produced specific and non-specific enzymes,
CC binding proteins, adhesion molecules and their receptors, cytokine and
CC chemokine receptors, adenosine receptors, bradykinin receptors, central
CC nervous system (CNS) and peripheral nervous and non-nervous system peptide
CC receptors, CNS and peripheral nervous and non-nervous system peptide
CC transmitters, defensins, growth factors, vasoactive peptides and
CC receptors, binding proteins and malignancy associated proteins. The
CC antisense oligonucleotides may be used in this way to treat disorders
CC including respiratory obstruction (especially pulmonary obstruction
CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
CC surfactant hypoproduction which are associated with a disease or
CC condition selected from pulmonary vasoconstriction, inflammation,
CC allergies, asthma, impeded respiration, respiratory distress syndrome
CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary

CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
 CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
 CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
 CC fragments and antisense oligonucleotides used in the exemplification of
 CC the present invention

XX
 SQ Sequence 14 BP; 0 A; 4 C; 2 G; 8 T; 0 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 14;
 Best Local Similarity 84.6%; Pred. No. 1.2e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 909 TTTCCTTGCTT 921
 DB 1 TTCCCTTGCTCT 13

RESULT 1277
 ABZ72881/C
 ID ABZ72881 standard; RNA; 14 BP.
 XX AC ABZ72881;
 XX
 DT 09-APR-2003 (first entry)
 XX
 DE Rod opsin hairpin ribozyme oligonucleotide.

XX Hairpin ribozyme; hammerhead ribozyme; ribozyme; retinal disease; target;
 KW ophthalmological; gene therapy; eye; retinal dysfunction; AAV;
 KW diabetic retinopathy; macular degeneration; autosomal dominant retinitis;
 KW blood-retinal barrier dysfunction; adeno-associated virus; blindness; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 PN WO200288320-A2.
 XX
 PD 07-NOV-2002.
 XX
 PF 01-MAY-2002; 2002WO-US013679.
 XX
 PR 01-MAY-2001; 2001US-00847601.
 XX (UYFL) UNIV FLORIDA.
 PA
 PI Lewin AS, Shaw LC, Grant MB;
 XX
 DR WPI; 2003-111880/10.
 XX
 PT A recombinant adeno-associated virus-vectored ribozyme composition,
 PT useful for treating a disease or dysfunction of the mammalian eye e.g.
 PT retinal disease, e.g. diabetic retinopathy or age-related macular
 PT degeneration.
 XX
 PS Example 5; Page 61; 115pp; English.

XX The present invention describes a recombinant adeno-associated virus
 CC (AAV) vectored ribozyme composition (I). (I) comprises: (a) at least a
 CC first ribozyme that specifically cleaves an mRNA encoding a protein,
 CC polypeptide, or peptide selected from the group of rod opsin, INOS,
 CC RDS/peripherin, VEGFR1, VEGFR2, adenosine A-2B receptor, IGF-1, integrin
 CC alpha 1, integrin alpha 3, integrin alpha 5, or integrin alpha V; (b) a
 CC vector comprising a polynucleotide encoding the ribozyme, where the
 CC polynucleotide operably positioned downstream of at least a first
 CC promoter that directs expression of the polynucleotide in a selected
 CC mammalian cell transformed with the vector; (c) a viral particle
 CC comprising the ribozyme or the polynucleotide; (d) an AAV vector

XX The present invention describes a recombinant adeno-associated virus
 CC (AAV) vectored ribozyme composition (I). (I) comprises: (a) at least a
 CC first ribozyme that specifically cleaves an mRNA encoding a protein,
 CC polypeptide, or peptide selected from the group of rod opsin, INOS,
 CC RDS/peripherin, VEGFR1, VEGFR2, adenosine A-2B receptor, IGF-1, integrin
 CC alpha 1, integrin alpha 3, integrin alpha 5, or integrin alpha V; (b) a
 CC vector comprising a polynucleotide encoding the ribozyme, where the
 CC polynucleotide operably positioned downstream of at least a first
 CC promoter that directs expression of the polynucleotide in a selected
 CC mammalian cell transformed with the vector; (c) a viral particle
 CC comprising the ribozyme or the polynucleotide; (d) an AAV vector

CC be used in gene therapy. (I) can be used for treating a disease or
 CC dysfunction of the mammalian eye, such as a retinal disease or retinal
 CC degeneration, (diabetic) retinopathy, or (age-related) macular
 CC degeneration. (I) is also useful for manufacturing a medicament for
 CC treating the diseases mentioned above, including autosomal dominant
 CC retinitis or a blood-retinal barrier dysfunction. (I) can also be useful
 CC for treating, decreasing the severity, or ameliorating the symptoms of a
 CC pathological condition, e.g. atrophic or pigmented lesions of the eye,
 CC blindness, a reduction in central or peripheral vision, or a reduction in
 CC total vision. ABZ72763 to ABZ72953 represent sequences used in the
 CC exemplification of the present invention

XX
 SQ Sequence 14 BP; 6 A; 1 C; 7 G; 0 T; 0 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 14;
 Best Local Similarity 84.6%; Pred. No. 1.2e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 922 TGCCCTTTATCCC 934
 DB 14 TGCCCTTTATCCC 2

RESULT 1278
 ABZ72882/C
 ID ABZ72882 standard; RNA; 14 BP.
 XX AC ABZ72882;
 XX
 DT 09-APR-2003 (first entry)
 XX
 DE Rod opsin hairpin ribozyme oligonucleotide.

XX Hairpin ribozyme; hammerhead ribozyme; ribozyme; retinal disease; target;
 KW ophthalmological; gene therapy; eye; retinal dysfunction; AAV;
 KW diabetic retinopathy; macular degeneration; autosomal dominant retinitis;
 KW blood-retinal barrier dysfunction; adeno-associated virus; blindness; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 PN WO200288320-A2.
 XX
 PD 07-NOV-2002.
 XX
 PF 01-MAY-2002; 2002WO-US013679.
 XX
 PR 01-MAY-2001; 2001US-00847601.
 XX (UYFL) UNIV FLORIDA.
 PA
 PI Lewin AS, Shaw LC, Grant MB;
 XX
 DR WPI; 2003-111880/10.
 XX
 PT A recombinant adeno-associated virus-vectored ribozyme composition,
 PT useful for treating a disease or dysfunction of the mammalian eye e.g.
 PT retinal disease, e.g. diabetic retinopathy or age-related macular
 PT degeneration.

XX Example 5; Page 61; 115pp; English.

XX The present invention describes a recombinant adeno-associated virus
 CC (AAV) vectored ribozyme composition (I). (I) comprises: (a) at least a
 CC first ribozyme that specifically cleaves an mRNA encoding a protein,
 CC polypeptide, or peptide selected from the group of rod opsin, INOS,
 CC RDS/peripherin, VEGFR1, VEGFR2, adenosine A-2B receptor, IGF-1, integrin
 CC alpha 1, integrin alpha 3, integrin alpha 5, or integrin alpha V; (b) a
 CC vector comprising a polynucleotide encoding the ribozyme, where the
 CC polynucleotide operably positioned downstream of at least a first
 CC promoter that directs expression of the polynucleotide in a selected
 CC mammalian cell transformed with the vector; (c) a viral particle
 CC comprising the ribozyme or the polynucleotide; (d) an AAV vector

XX The present invention describes a recombinant adeno-associated virus
 CC (AAV) vectored ribozyme composition (I). (I) comprises: (a) at least a
 CC first ribozyme that specifically cleaves an mRNA encoding a protein,
 CC polypeptide, or peptide selected from the group of rod opsin, INOS,
 CC RDS/peripherin, VEGFR1, VEGFR2, adenosine A-2B receptor, IGF-1, integrin
 CC alpha 1, integrin alpha 3, integrin alpha 5, or integrin alpha V; (b) a
 CC vector comprising a polynucleotide encoding the ribozyme, where the
 CC polynucleotide operably positioned downstream of at least a first
 CC promoter that directs expression of the polynucleotide in a selected
 CC mammalian cell transformed with the vector; (c) a viral particle
 CC comprising the ribozyme or the polynucleotide; (d) an AAV vector

XX The present invention describes a recombinant adeno-associated virus
 CC (AAV) vectored ribozyme composition (I). (I) comprises: (a) at least a
 CC first ribozyme that specifically cleaves an mRNA encoding a protein,
 CC polypeptide, or peptide selected from the group of rod opsin, INOS,
 CC RDS/peripherin, VEGFR1, VEGFR2, adenosine A-2B receptor, IGF-1, integrin
 CC alpha 1, integrin alpha 3, integrin alpha 5, or integrin alpha V; (b) a
 CC vector comprising a polynucleotide encoding the ribozyme, where the
 CC polynucleotide operably positioned downstream of at least a first
 CC promoter that directs expression of the polynucleotide in a selected
 CC mammalian cell transformed with the vector; (c) a viral particle
 CC comprising the ribozyme or the polynucleotide; (d) an AAV vector

The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions,

XX
SO
Sequence 15 BP: 6 A: 0 C: 9 G: 0 T: 0 U: 0 Other;


```

Query Match      13.4%; Score 9.8; DB 1; Length 15;
Best Local Similarity 84.6%; Pred. No. 1.2e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY  924 CCTTTATCCCTC 936
Db   13 CCTTCTCCCTC 1

RESULT 1281
AAQ38155
ID  AAQ38155 standard; DNA; 15 BP.
XX
AC  AAQ38155;
XX
DT  25-MAR-2003 (revised)
DT  01-JUL-1993 (first entry)
XX
DE  Mycobacterium 23S rRNA non-exclusive probe/primer #3.
XX
KW  Primer; probe; 16S; 23S; rRNA; Mycobacteria; subgeneric; class; rDNA;
KW  hybridisation; amplify; PCR; ss.
XX
OS  Synthetic.
XX
PN  WO9304201-A1.
XX
PD  04-MAR-1993.
XX
PF  13-AUG-1992; 92WO-US006821.
XX
PR  13-AUG-1991; 91US-00744282.
XX
PA  (STAD ) AMOCO CORP.
XX
PI  Liu J, Nietupski RM, Shah JS;
XX
DR  WPI; 1993-094026/11.
XX
PT  Oligo-nucleotide(s) complementary to Mycobacterial ribosomal RNA or DNA -
PT  used for detection and identification of Mycobacterial in hybridisation
PT  and amplification assays.
XX
PS  Disclosure; Page 20; 121pp; English.
XX
CC  The sequences given in AAQ38150-59 are primer/probes which correspond to
CC  a region 5' of the 16S and 23S rRNA genes of Mycobacterial sp. and
CC  members of subgeneric classes. These oligomers hybridise to >10% of other
CC  bacterial sp. including mycobacterium sp., these are non- exclusive. The
CC  primer/probe sequences given in AAQ38108-46 hybridise under assay
CC  conditions to rRNA/rDNA from >90% of common mycobacterium sp., these
CC  oligomers are non-exclusive. All these oligomers can be used to detect
CC  Mycobacterium and their subgeneric classes by hybridisation or by
CC  amplification. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ  Sequence 15 BP; 2 A; 6 C; 1 G; 5 T; 0 U; 1 Other;

Query Match      13.4%; Score 9.8; DB 1; Length 15;
Best Local Similarity 73.3%; Pred. No. 1.2e+03;
Matches 11; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

QY  920 TTGCGTTTATCC 934
Db   1 TTAGCGTTTACCCC 15

RESULT 1282
AAQ68767
ID  AAQ68767 standard; DNA; 15 BP.
XX
AC  AAQ68767;
XX
DT  19-FEB-1995 (first entry)
XX
DE  CHA255 heavy chain CDR3 clone 3.7.1. coding sequence.
XX
KW  Polymerase chain reaction; primer; PCR; amplify; heavy; light; chain;
KW  complementarity determining region; CDR; variable; constant; region;
KW  monoclonal antibody; MAb; binding affinity; EDTA; DOTA; tumour; cancer;
KW  colorectal; breast; metal chelate; hapten; ss.
XX
OS  Synthetic.
XX
PN  AU9350602-A.
XX
PD  26-MAY-1994.
XX
PF  10-NOV-1993; 93AU-00050602.
XX

```

```

12-NOV-1992; 92US-00975230.
(HYBR-) HYBRITECH INC.
Ahweiler PM, Moore MD;
WPI; 1994-209063/26.
P-PSDB; AAR54165.
Polypeptide used in imaging and treatment of carcinomas and tumours -
comprising substd antibody CDR having binding affinity for metal chelate
of EDTA or DETA or analogues.
Claim 25; Fig 3A; 61pp; English.
The sequences given in AAQ88758-68 encode the wild type and mutagenised
versions of the complementarity determining region 3 (CDR3) of the
antibody designated CHA255. CHA255 is a murine monoclonal antibody (MAb)
which is capable of binding complexes. Mutagenesis of these CDRs, causes
the production of polypeptides with a particularly high binding affinity
for EDTA or DOTA metal complexes. CDR1 and -3 of the heavy chain, and
CDR2 and -3 of the light chain were targeted for mutagenesis. Five
residues of both CDR1 and -3 of the CHA255 heavy chain, five of seven
residues of light chain CDR and six of nine light chain CDR3 residues
were specifically targeted for codon-based mutagenesis. The mutagenised
MAb's can be used in compositions for in vivo imaging of malignant
tissues or tumours. They are also useful for the treatment of malignant
tissues or tumours eg. colorectal or breast cancer. Both methods involve
the use of radionuclides which bind to metal chelates or haptens which
are specifically delivered to the target site by a targeting molecule.
CDR derived peptides may be used to construct bi-functional antibodies
having dual specificities, or as donor or recipients of CDR sequences
Sequence 15 BP; 2 A; 3 C; 4 G; 6 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 15;
Best Local Similarity 84.6%; Pred. No. 1.2e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
y 942 CATGTGTTTAATG 954
||| |||||
b 1 CATCGGTTTACTG 13
RESULT 1284
AAQ88369/c
AAQ88369 standard; DNA; 15 BP.
AAQ88369;
18-DEC-1995 (first entry)
Set of 15mer probes for CFTR gene analysis.
Tiling strategy; immobilised nucleic acid probe array; CFTR gene;
cystic fibrosis transmembrane conductance regulator; hybridisation;
biological chip; interrogation position; ss.
Synthetic.
Key Location/Qualifiers
misc_difference 9 /*tag= a
/ note= "N is A, T, C or G, i.e. the sequence represents a
set of 4 probes"
WO9511995-A1.
04-MAY-1995.
26-OCT-1994; 94WO-US012305.
26-OCT-1993; 93US-00143312.

```


I	SS.	943	ATTGGTTTAATGT	955
I				
I	Homo sapiens.	15	ATTGGTTTACTCT	3
I				
I	WO95232225-A2.			
I				
I	D	31-AUG-1995.		
I				
I	F	23-FEB-1995;	95WO-IB000156.	
I				
I	R	23-FEB-1994;	94US-00201109.	
I	R	23-MAR-1994;	94US-00218934.	
I	R	04-APR-1994;	94US-00222795.	
I	R	07-APR-1994;	94US-00224483.	
I	R	15-APR-1994;	94US-00227958.	
I	R	15-APR-1994;	94US-00228041.	
I	R	15-APR-1994;	94US-002271280.	
I	R	18-MAY-1994;	94US-00245736.	
I	R	08-JUL-1994;	94US-002711280.	
I	R	15-AUG-1994;	94US-00291433.	
I	R	16-AUG-1994;	94US-00292620.	
I	R	17-AUG-1994;	94US-00293520.	
I	R	18-AUG-1994;	94US-00293520.	
I	R	19-AUG-1994;	94US-00300000.	
I	R	02-SEP-1994;	94US-00303039.	
I	R	08-SEP-1994;	94US-00311486.	
I	R	23-SEP-1994;	94US-00311749.	
I	R	23-SEP-1994;	94US-00314397.	
I	R	03-OCT-1994;	94US-00316771.	
I	R	07-OCT-1994;	94US-00319492.	
I	R	11-OCT-1994;	94US-00321993.	
I	R	04-NOV-1994;	94US-00334847.	
I	R	10-NOV-1994;	94US-00337608.	
I	R	28-NOV-1994;	94US-00345516.	
I	R	16-DEC-1994;	94US-00357577.	
I	R	23-DEC-1994;	94US-00363233.	
I	R	30-JAN-1995;	95US-00380734.	
I				
I	R	(RIBO-) RIBOZYME PHARM INC.		
I	A	Stinchcomb DT, Chowrira B, Drenzo A, Draper KG, Dudycz LW;		
I	X	Grimm S, Karpeisky A, Kisch K, Matulic-Adamic J, Mcswiggen JA;		
I	I	Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;		
I	I	Tracz D, Usman N, Wincott FE, Woolf T;		
I	X	WPI; 1995-351090/45.		
I	R			
I	R	Ribozymes having modified bases and methods for producing them - for use		
I	X	in inhibiting disease related genes.		
I	T			
I	T			
I	T			
I	S	Claim 2; Page 214; 407pp; English.		
I	X			
I	X	The present sequence represents a preferred target sequence for an		
I	X	enzymatic nucleic acid (i.e. a ribozyme) which cleaves interleukin-5 (IL-		
I	X	5) mRNA at the nucleotide base position indicated in the DE line. Regions		
I	X	of the mRNA that do not form secondary folding structures and that		
I	X	contain potential hammerhead and hairpin ribozyme cleavage sites were		
I	X	identified by computer analysis. Ribozymes directed against these mRNA		
I	X	sequences were designed and synthesised with modifications that improve		
I	X	their nuclease resistance. The ribozymes cleave the IL-5 target sequences		
I	X	and thereby inhibit IL-5 expression, making them useful for treating		
I	X	chronic asthma, e.g. by inhibiting the synthesis of IL-5 in lymphocytes		
I	X	and preventing the recruitment and activation of eosinophils. The		
I	X	ribozymes can also be used to treat eosinophilia (related to parasitic		
I	X	infection or with pulmonary infiltration) and L-tryptophan-associated		
I	X	eosinophilia-myalgia syndrome. (Updated on 25-MAR-2003 to correct FI		
I	X	field.)		
I	X			
I	XX	Sequence 15 BP; 7 A; 2 C; 4 G; 0 T; 2 U; 0 Other;		
I	SQ			
I		Query Match 13.4%; Score 9.8; DB 1; Length 15;		
I		Best Local Similarity 84.6%; Pred. No. 1.2e+03;		
I		Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;		

```

PT in inhibiting disease related genes.
XX Claim 2; Page 241; 407pp; English.
XX
CC The present sequence represents a preferred target sequence for an
CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves TNF-alpha mRNA at
CC the nucleotide base position indicated in the DE line. Regions of the
CC mRNA that do not form secondary folding structures and that contain
CC potential hammerhead and hairpin ribozyme cleavage sites were identified
CC by computer analysis. Ribozymes directed against these mRNA sequences
CC were designed and synthesised with modifications that improve their
CC nuclease resistance. The ribozymes are designed to cleave the target
CC sequences and thereby inhibit TNF-alpha expression, making them
CC potentially useful for treating rheumatoid arthritis, septic shock and
CC other inflammatory disorders including psoriasis, as well as for
CC treatment of AIDS. (Updated on 25-MAR-2003 to correct PI field.)
XX
SQ Sequence 15 BP; 2 A; 5 C; 4 G; 0 T; 4 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 15;
PS Best Local Similarity 53.8%; Pred. No. 1.2e+03;
Matches 7; Conservative 4; Mismatches 2; Indels 0; Gaps 0;

QY 935 TCCTCTTCATTGG 947
Db :||:|:|:| ||
2 UCCUCUUCACGG 14

RESULT 1289
AAT54238
ID AAT54238 standard; RNA; 15 BP.
AC AAT54238;
XX
CC 25-MAR-2003 (revised)
CC 24-MAR-1997 (first entry)
DT
XX
DE Human IL-5 hammerhead ribozyme target sequence (nt. position 419).
KW Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
KW intercellular adhesion molecule; rei A; tumour necrosis factor;
KW TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
KW translocation; chronic myelogenous leukaemia; CML; cancer;
KW Philadelphia chromosome; inflammation; autoimmune disease;
KW atherosclerosis; myocardial infarction; stroke; restenosis;
KW transplant rejection; rheumatoid arthritis; stroke; restenosis;
KW myocardial ischaemia; Kawasaki disease; septic shock; HIV;
KW human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
KW ss.
OS Homo sapiens.
XX
XX WO9523225-A2.
XX
PD 31-AUG-1995.
XX
PF 23-FEB-1995; 95WO-IB000156.
XX
PR 23-FEB-1994; 94US-00201109.
PR 29-MAR-1994; 94US-00218934.
PR 04-APR-1994; 94US-00222795.
PR 07-APR-1994; 94US-00224483.
PR 15-APR-1994; 94US-00227958.
PR 15-APR-1994; 94US-00228041.
PR 18-MAY-1994; 94US-00245736.
PR 06-JUL-1994; 94US-00271280.
PR 15-AUG-1994; 94US-00291932.
PR 16-AUG-1994; 94US-00291433.
PR 17-AUG-1994; 94US-00292620.
PR 19-AUG-1994; 94US-00293520.
PR 02-SEP-1994; 94US-00300000.
PR 08-SEP-1994; 94US-00303039.
XX
PR 23-SEP-1994; 94US-00311486.
PR 23-SEP-1994; 94US-00311749.
PR 28-SEP-1994; 94US-00314397.
PR 03-OCT-1994; 94US-00316771.
PR 07-OCT-1994; 94US-00319492.
PR 11-OCT-1994; 94US-00321993.
PR 04-NOV-1994; 94US-00334847.
PR 10-NOV-1994; 94US-00337608.
PR 28-NOV-1994; 94US-00345516.
PR 16-DEC-1994; 94US-00357577.
PR 23-DEC-1994; 94US-00363233.
PR 30-JAN-1995; 95US-00380734.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Stinchcomb DT, Chowrira B, Drenzo A, Draper KG, Dudycz LW;
PI Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, McSwiggen JA;
PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
PI Tracz D, Usman N, Wincott FE, Woolf T;
XX
XX WPI; 1995-351090/45.
XX
PT Ribozymes having modified bases and methods for producing them - for use
XX in inhibiting disease related genes.
XX
PS Claim 2; Page 214; 407pp; English.
XX
CC The present sequence represents a preferred target sequence for an
CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves interleukin-5 (IL-
CC 5) mRNA at the nucleotide base position indicated in the DE line. Regions
CC of the mRNA that do not form secondary folding structures and that
CC contain potential hammerhead and hairpin ribozyme cleavage sites were
CC identified by computer analysis. Ribozymes directed against these mRNA
CC sequences were designed and synthesised with modifications that improve
CC their nuclease resistance. The ribozymes cleave the IL-5 target sequences
CC and thereby inhibit IL-5 expression, making them useful for treating
CC chronic asthma, e.g. by inhibiting the synthesis of IL-5 in lymphocytes
CC and preventing the recruitment and activation of eosinophils. The
CC ribozymes can also be used to treat eosinophilia (related to parasitic
CC infection or with pulmonary infiltration) and L-tryptophan-associated
CC eosinophilia-myalgia syndrome. (Updated on 25-MAR-2003 to correct PI
CC field.)
XX
SQ Sequence 15 BP; 5 A; 1 C; 4 G; 0 T; 5 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 15;
PS Best Local Similarity 46.2%; Pred. No. 1.2e+03;
Matches 6; Conservative 5; Mismatches 2; Indels 0; Gaps 0;

QY 944 TTGGTTTATGTA 956
Db :||:|:|:| ||
1 UUGGUGUUAUGAA 13

RESULT 1290
AAT54618
ID AAT54618 standard; RNA; 15 BP.
XX
AC AAT54618;
XX
XX 25-MAR-2003 (revised)
XX 22-APR-1997 (first entry)
DT
XX
DE Mouse IL-5 hammerhead ribozyme target sequence (nt. position 825).
XX
KW Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
KW intercellular adhesion molecule; rei A; tumour necrosis factor;
KW TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
KW translocation; chronic myelogenous leukaemia; CML; cancer;
KW Philadelphia chromosome; inflammation; autoimmune disease;
KW atherosclerosis; myocardial infarction; stroke; restenosis;
KW transplant rejection; rheumatoid arthritis; psoriasis;

```

1 myocardial ischaemia; Kawasaki disease; septic shock; HIV;
2 human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
3 ss.
4
5 Mus musculus.
6
7 WO9523225-A2.
8
9 31-AUG-1995.
10
11 23-FEB-1995; 95WO-IB000156.
12
13 23-FEB-1994; 94US-00201109.
14 23-MAR-1994; 94US-00218934.
15 04-APR-1994; 94US-00222795.
16 07-APR-1994; 94US-00224483.
17 15-APR-1994; 94US-00227958.
18 15-APR-1994; 94US-00228041.
19 18-MAY-1994; 94US-00245736.
20 06-JUL-1994; 94US-00271280.
21 15-AUG-1994; 94US-00291433.
22 16-AUG-1994; 94US-00291433.
23 17-AUG-1994; 94US-00293520.
24 19-AUG-1994; 94US-00293520.
25 02-SEP-1994; 94US-00300000.
26 08-SEP-1994; 94US-00303039.
27 23-SEP-1994; 94US-00311486.
28 23-SEP-1994; 94US-00311486.
29 23-SEP-1994; 94US-00311486.
30 03-OCT-1994; 94US-00316771.
31 07-OCT-1994; 94US-00319492.
32 11-OCT-1994; 94US-00321993.
33 04-NOV-1994; 94US-00334847.
34 28-NOV-1994; 94US-00337608.
35 18-NOV-1994; 94US-00345516.
36 16-DEC-1994; 94US-00357577.
37 23-DEC-1994; 94US-00363233.
38 30-JAN-1995; 95US-00380734.
39
40 (RIBO-) RIBOZYME PHARM INC.
41
42 Stinchcomb DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW;
43 Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, McSwiggen JA;
44 Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
45 Tracz D, Usman N, Wincott FE, Woolf T;
46 WPI; 1995-351090/45.
47
48 Ribozymes having modified bases and methods for producing them - for use
49 in inhibiting disease related genes.
50
51 Claim 2; Page 221; 407pp; English.
52
53 The present sequence represents a preferred target sequence for an
54 enzymatic nucleic acid (i.e. a ribozyme) which cleaves interleukin-5 (IL-
55 5) mRNA at the nucleotide base position indicated in the DE line. Regions
56 of the mRNA that do not form secondary folding structures and that
57 contain potential hammerhead and hairpin ribozyme cleavage sites were
58 identified by computer analysis. Ribozymes directed against these mRNA
59 sequences were designed and synthesised with modifications that improve
60 their nuclease resistance. The ribozymes cleave the IL-5 target sequences
61 and thereby inhibit IL-5 expression, making them useful for treating
62 chronic asthma, e.g. by inhibiting the synthesis of IL-5 in lymphocytes
63 and preventing the recruitment and activation of eosinophils. The
64 ribozymes can also be used to treat eosinophilia (related to parasitic
65 infection or with pulmonary infiltration) and L-tryptophan-associated
66 eosinophilia-myalgia syndrome. (Updated on 25-MAR-2003 to correct PI
67 field.)
68
69 Sequence 15 BP; 2 A; 10 C; 0 G; 0 T; 3 U; 0 Other;
70
71 Query Match 13.4%; Score 9.8; DB 1; Length 15;
72 Best Local Similarity 61.5%; Pred. No. 1.2e+03;
73

Matches 8; Conservative 3; Mismatches 2; Indels 0; Gaps 0;
Qy 931 TCCCTCTCTTCA 943
Db 3 UCCUCCCCCUCA 15
RESULT 1291
AAT51949/c
ID AAT51949 standard; RNA; 15 BP.
XX AC AAT51949;
XX DT 25-MAR-2003 (revised)
DT 18-MAR-1997 (first entry)
XX DE Human ICAM hammerhead ribozyme target sequence (nt. position 1294).
XX KW Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
KW intercellular adhesion molecule; rel A; tumour necrosis factor;
KW TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
KW translocation; chronic myelogenous leukaemia; CML; cancer;
KW Philadelphia chromosome; inflammation; autoimmune disease;
KW atherosclerosis; myocardial infarction; stroke; restenosis;
KW transplant rejection; rheumatoid arthritis; psoriasis;
KW myocardial ischaemia; Kawasaki disease; septic shock; HIV;
KW human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
KW ss.
XX OS Homo sapiens.
XX PN WO9523225-A2.
XX PD 31-AUG-1995.
XX PF 23-FEB-1995; 95WO-IB000156.
XX PR 23-FEB-1994; 94US-00201109.
XX PR 29-MAR-1994; 94US-00218934.
XX PR 04-APR-1994; 94US-00222795.
XX PR 07-APR-1994; 94US-00224483.
XX PR 15-APR-1994; 94US-00227958.
XX PR 15-APR-1994; 94US-00228041.
XX PR 18-MAY-1994; 94US-00245736.
XX PR 06-JUL-1994; 94US-00271280.
XX PR 15-AUG-1994; 94US-00291432.
XX PR 16-AUG-1994; 94US-00291433.
XX PR 17-AUG-1994; 94US-00293520.
XX PR 19-AUG-1994; 94US-00293520.
XX PR 02-SEP-1994; 94US-00300000.
XX PR 08-SEP-1994; 94US-00303039.
XX PR 23-SEP-1994; 94US-00311486.
XX PR 23-SEP-1994; 94US-00311486.
XX PR 23-SEP-1994; 94US-00311486.
XX PR 28-SEP-1994; 94US-00316771.
XX PR 03-OCT-1994; 94US-00316771.
XX PR 07-OCT-1994; 94US-00319492.
XX PR 11-OCT-1994; 94US-00321993.
XX PR 04-NOV-1994; 94US-00334847.
XX PR 28-NOV-1994; 94US-00337608.
XX PR 18-NOV-1994; 94US-00345516.
XX PR 16-DEC-1994; 94US-00357577.
XX PR 23-DEC-1994; 94US-00363233.
XX PR 30-JAN-1995; 95US-00380734.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI Stinchcomb DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW;
PI Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, McSwiggen JA;
PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
PI Tracz D, Usman N, Wincott FE, Woolf T;
XX WPI; 1995-351090/45.
DR

XX Ribozymes having modified bases and methods for producing them - for use
PT in inhibiting disease related genes.
XX
XX
PS
XX
XX Claim 2; Page 173; 407pp; English.
CC
CC The present sequence represents a preferred target sequence for an
CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA at the
CC nucleotide base position indicated in the DE line. Regions of the mRNA
CC that do not form secondary folding structures and that contain potential
CC hammerhead and hairpin ribozyme cleavage sites were identified by
CC computer analysis. Ribozymes directed against these mRNA sequences were
CC designed and synthesised with modifications that improve their nuclease
CC resistance. The ribozymes cleave the ICAM-1 target sequences and thereby
CC inhibit ICAM-1 expression, making them useful for reducing transplant
CC rejection and alleviating symptoms in patients with rheumatoid arthritis,
CC asthma and other inflammatory disorders. (Updated on 25-MAR-2003 to
CC correct PI field.)
XX
XX Sequence 15 BP; 7 A; 4 C; 2 G; 0 T; 2 U; 0 Other;
SQ
Query Match 13.4%; Score 9.8; DB 1; Length 15;
Best Local Similarity 84.6%; Pred. No. 1.2e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 901 CTGGTCATTTTCT 913
DB 13 CTGGGAATTTTCT 1
RESULT 1292
AAT52087/C
ID AAT52087 standard; RNA; 15 BP.
XX
XX AAT52087;
AC
XX
DT 25-MAR-2003 (revised)
DT 24-MAR-1997 (first entry)
XX
XX Human ICAM hammerhead ribozyme target sequence (nt. position 2479).
XX
XX Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
KW intercellular adhesion molecule; rel A; tumour necrosis factor;
KW TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
KW translocation; chronic myelogenous leukaemia; CML; cancer;
KW Philadelphia chromosome; inflammation; autoimmune disease;
KW atherosclerosis; myocardial infarction; stroke; restenosis;
KW transplant rejection; rheumatoid arthritis; psoriasis;
KW myocardial ischaemia; Kawasaki disease; acquired immune deficiency syndrome; AIDS;
KW ss.
XX
XX Homo sapiens.
XX
XX OS
XX
XX WO9523225-A2.
XX
XX
XX 31-AUG-1995.
XX
XX 23-FEB-1995; 95WO-IB000156.
XX
XX 23-FEB-1994; 94US-00201109.
XX 29-MAR-1994; 94US-00218934.
XX 04-APR-1994; 94US-00222795.
XX 07-APR-1994; 94US-00224483.
XX 15-APR-1994; 94US-00227958.
XX 15-APR-1994; 94US-00228041.
XX 18-MAY-1994; 94US-00245736.
XX 06-JUL-1994; 94US-00271280.
XX 15-AUG-1994; 94US-00291932.
XX 16-AUG-1994; 94US-00291433.
XX 17-AUG-1994; 94US-00292620.
XX 19-AUG-1994; 94US-00293520.

PR 02-SEP-1994; 94US-00300000.
PR 08-SEP-1994; 94US-00303039.
PR 23-SEP-1994; 94US-00311486.
PR 23-SEP-1994; 94US-00311749.
PR 28-SEP-1994; 94US-00314397.
PR 03-OCT-1994; 94US-00316771.
PR 07-OCT-1994; 94US-00319492.
PR 11-OCT-1994; 94US-00321993.
PR 04-NOV-1994; 94US-003334847.
PR 10-NOV-1994; 94US-00337608.
PR 28-NOV-1994; 94US-00345516.
PR 16-DEC-1994; 94US-00357577.
PR 23-DEC-1994; 94US-00363233.
PR 30-JAN-1995; 95US-00380734.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Stinchcomb DT, Chowrira B, Drenzo A, Draper KG, Dudycz LW;
PI Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
PI Tracz D, Usman N, Wincott PE, Wolff T;
XX WPI; 1995-351090/45.
XX
XX Ribozymes having modified bases and methods for producing them - for use
PT in inhibiting disease related genes.
XX
XX Claim 2; Page 175; 407pp; English.
XX
XX The present sequence represents a preferred target sequence for an
CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA at the
CC nucleotide base position indicated in the DE line. Regions of the mRNA
CC that do not form secondary folding structures and that contain potential
CC hammerhead and hairpin ribozyme cleavage sites were identified by
CC computer analysis. Ribozymes directed against these mRNA sequences were
CC designed and synthesised with modifications that improve their nuclease
CC resistance. The ribozymes cleave the ICAM-1 target sequences and thereby
CC inhibit ICAM-1 expression, making them useful for reducing transplant
CC rejection and alleviating symptoms in patients with rheumatoid arthritis,
CC asthma and other inflammatory disorders. (Updated on 25-MAR-2003 to
CC correct PI field.)
XX
XX Sequence 15 BP; 3 A; 4 C; 3 G; 0 T; 5 U; 0 Other;
SQ
Query Match 13.4%; Score 9.8; DB 1; Length 15;
Best Local Similarity 84.6%; Pred. No. 1.2e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 959 GCTACCAAGGTG 971
DB 15 GCTACCAAGGTG 3
RESULT 1293
AAT54334
ID AAT54334 standard; RNA; 15 BP.
XX
XX AAT54334;
XX
XX 25-MAR-2003 (revised)
DT 24-MAR-1997 (first entry)
XX
XX Human IL-5 hammerhead ribozyme target sequence (nt. position 771).
DE
XX Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
KW intercellular adhesion molecule; rel A; tumour necrosis factor;
KW TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
KW translocation; chronic myelogenous leukaemia; CML; cancer;
KW Philadelphia chromosome; inflammation; autoimmune disease;
KW atherosclerosis; myocardial infarction; stroke; restenosis;
KW transplant rejection; rheumatoid arthritis; psoriasis;
KW myocardial ischaemia; Kawasaki disease; septic shock; HIV;

[illegible]

Ribozymes having modified bases and methods for producing them - for use in inhibiting disease related genes.

Claim 2; Page 221; 407pp; English.

The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves interleukin-5 (IL-5) mRNA at the nucleotide base position indicated in the DE line. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes cleave the IL-5 target sequences and thereby inhibit IL-5 expression, making them useful for treating chronic asthma, e.g. by inhibiting the synthesis of IL-5 in lymphocytes and preventing the recruitment and activation of eosinophils. The ribozymes can also be used to treat eosinophilia (related to parasitic infection or with pulmonary infiltration) and L-tryptophan-associated eosinophilia-myalgia syndrome. (Updated on 25-MAR-2003 to correct PI field.)

Sequence 15 BP; 2 A; 10 C; 0 G; 0 T; 3 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 15;
Best Local Similarity 61.5%; Pred. No. 1.2e+03;
Matches 8; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

QY 931 TCCTCTCTTCA 943
:||||:||||:
Db 3 UCCUCCUCCUCA 15

RESULT 1295
AAT55666
ID AAT55666 standard; RNA; 15 BP.
XX
AC AAT55666;
XX
DT 25-MAR-2003 (revised)
DT 21-MAR-1997 (first entry)
XX
DE Human TNF-alpha hammerhead ribozyme target sequence (nt position 505).
XX
KW Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
KW intercellular adhesion molecule; rel A; tumour necrosis factor;
KW TNF-alpha; respiratory syncytial virus; RSV; bor-abl; oncogene;
KW translocation; chronic myelogenous leukaemia; CML; cancer;
KW Philadelphia chromosome; inflammation; autoimmune disease;
KW atherosclerosis; myocardial infarction; stroke; restenosis;
KW transplant rejection; rheumatoid arthritis; psoriasis;
KW myocardial ischaemia; Kawasaki disease; septic shock; HIV;
KW human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
KW ss.
XX
OS Homo sapiens.
XX
FN W09523225-A2.
XX
PD 31-AUG-1995.
XX
PF 23-FEB-1995; 95WO-IB000156.
XX
PR 23-FEB-1994; 94US-00201109.
PR 29-MAR-1994; 94US-00218934.
PR 04-APR-1994; 94US-00222795.
PR 07-APR-1994; 94US-00224483.
PR 15-APR-1994; 94US-00227958.
PR 15-APR-1994; 94US-00228041.
PR 18-MAY-1994; 94US-00245736.
PR 06-JUL-1994; 94US-00271280.
PR 15-AUG-1994; 94US-00291932.
PR 16-AUG-1994; 94US-00291433.

PR 17-AUG-1994; 94US-00292620.
PR 19-AUG-1994; 94US-00293520.
PR 02-SEP-1994; 94US-00300000.
PR 08-SEP-1994; 94US-00303039.
PR 23-SEP-1994; 94US-00311486.
PR 23-SEP-1994; 94US-00311749.
PR 28-SEP-1994; 94US-00314397.
PR 03-OCT-1994; 94US-00316771.
PR 07-OCT-1994; 94US-00319492.
PR 11-OCT-1994; 94US-00321993.
PR 04-NOV-1994; 94US-00334847.
PR 10-NOV-1994; 94US-00337608.
PR 28-NOV-1994; 94US-00345516.
PR 16-DEC-1994; 94US-00357577.
PR 23-DEC-1994; 94US-00363233.
PR 30-JAN-1995; 95US-00380734.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Stinchcomb DT, Chowrira B, Drenzo A, Draper KG, Dudycz LW;
PI Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
PI Tracz D, Usman N, Wincott FE, Woolf T;
XX
DR WPI; 1995-351090/45.
XX
PT Ribozymes having modified bases and methods for producing them - for use
PT in inhibiting disease related genes.
XX
PS Claim 2; Page 241; 407pp; English.
XX
CC The present sequence represents a preferred target sequence for an
CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves TNF-alpha mRNA at
CC the nucleotide base position indicated in the DE line. Regions of the
CC mRNA that do not form secondary folding structures and that contain
CC potential hammerhead and hairpin ribozyme cleavage sites were identified
CC by computer analysis. Ribozymes directed against these mRNA sequences
CC were designed and synthesised with modifications that improve their
CC nuclease resistance. The ribozymes are designed to cleave the target
CC sequences and thereby inhibit TNF-alpha expression, making them
CC potentially useful for treating rheumatoid arthritis, septic shock and
CC other inflammatory disorders including psoriasis, as well as for
CC treatment of AIDS. (Updated on 25-MAR-2003 to correct PI field.)
XX
SQ Sequence 15 BP; 2 A; 6 C; 3 G; 0 T; 4 U; 0 Other;
XX
Query Match 13.4%; Score 9.8; DB 1; Length 15;
Best Local Similarity 53.8%; Pred. No. 1.2e+03;
Matches 7; Conservative 4; Mismatches 2; Indels 0; Gaps 0;

QY 935 TCCTCTTCATTGG 947
:||||:||||:
Db 1 UCCUCCUCAAGGG 13

RESULT 1296
AAT52089/c
ID AAT52089 standard; RNA; 15 BP.
XX
AC AAT52089;
XX
DT 25-MAR-2003 (revised)
DT 24-MAR-1997 (first entry)
XX
DE Human ICAM hammerhead ribozyme target sequence (nt. position 2480).
XX
KW Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
KW intercellular adhesion molecule; rel A; tumour necrosis factor;
KW TNF-alpha; respiratory syncytial virus; RSV; bor-abl; oncogene;
KW translocation; chronic myelogenous leukaemia; CML; cancer;
KW Philadelphia chromosome; inflammation; autoimmune disease;
KW atherosclerosis; myocardial infarction; stroke; restenosis;

transplant rejection; rheumatoid arthritis; psoriasis;
myocardial ischaemia; Kawasaki disease; septic shock; HIV;
human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
ss.
X Homo sapiens.
X WO9523225-A2.
X 31-AUG-1995.
X 23-FEB-1995; 95WO-IB000156.
X 23-FEB-1994; 94US-00201109.
X 23-MAR-1994; 94US-00218934.
X 04-APR-1994; 94US-00222795.
X 07-APR-1994; 94US-00224483.
X 15-APR-1994; 94US-00227958.
X 15-APR-1994; 94US-00228041.
X 18-MAY-1994; 94US-00245736.
X 06-JUL-1994; 94US-00271280.
X 15-AUG-1994; 94US-00291932.
X 16-AUG-1994; 94US-00291433.
X 17-AUG-1994; 94US-00292620.
X 19-AUG-1994; 94US-00293520.
X 02-SEP-1994; 94US-00300000.
X 08-SEP-1994; 94US-00303039.
X 23-SEP-1994; 94US-00311486.
X 23-SEP-1994; 94US-00311749.
X 28-SEP-1994; 94US-00314397.
X 03-OCT-1994; 94US-00316771.
X 07-OCT-1994; 94US-00319492.
X 11-OCT-1994; 94US-00321993.
X 04-NOV-1994; 94US-00334847.
X 10-NOV-1994; 94US-00337608.
X 28-NOV-1994; 94US-00345516.
X 16-DEC-1994; 94US-00357577.
X 23-DEC-1994; 94US-00363233.
X 30-JAN-1995; 95US-00380734.
(RIBO-) RIBOZYME PHARM INC.
Stinchcomb DT, Chowrira B, Drenzo A, Draper KG, Dudycz LW;
Grimm S, Karpeisky A, Kisch K, Matulic-Adamic J, Mswiggen JA;
Modak A, Pavco P, Beigelman L, Sullivan SM, Sweedler D, Thompson JD;
Tracz D, Usman N, Wincott FE, Woolf T;
WPI; 1995-351090/45.
Ribozymes having modified bases and methods for producing them - for use
in inhibiting disease related genes.
Claim 2; Page 175; 407pp; English.
The present sequence represents a preferred target sequence for an
enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA at the
nucleotide base position indicated in the DE line. Regions of the mRNA
that do not form secondary folding structures and that contain potential
hammerhead and hairpin ribozyme cleavage sites were identified by
computer analysis. Ribozymes directed against these mRNA sequences were
designed and synthesised with modifications that improve their nuclease
resistance. The ribozymes cleave the ICAM-1 target sequences and thereby
inhibit ICAM-1 expression, making them useful for reducing transplant
rejection and alleviating symptoms in patients with rheumatoid arthritis,
asthma and other inflammatory disorders. (Updated on 25-MAR-2003 to
correct PI field.)
Sequence 15 BP; 3 A; 5 C; 2 G; 0 T; 5 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 15;
Best Local Similarity 84.6%; Pred. No. 1.2e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 959 GCTACCAACGGTG 971
|||||
Db 14 GCTAACAAAGGTG 2
RESULT 1297
AA66317
ID AAX66317 standard; RNA; 15 BP.
XX
XX AAX66317;
AC
XX
DT 20-JUL-1999 (first entry)
XX
DE Mouse B7-2 hammerhead ribozyme target SEQ ID NO:2949.
XX
XX Arthritic condition; graft tolerance; immune response; target; cleavage;
XX hammerhead ribozyme; hairpin ribozyme; human; rabbit; mouse; collagenase;
XX stromelysin; synovial membrane; joint; arthritis; osteoarthritis;
XX rheumatoid arthritis; autoimmune disease; allergy; inflammation;
XX diagnosis; ss.
OS Mus sp.
XX
XX WO9618736-A2.
XX
XX 20-JUN-1996.
XX
XX 22-NOV-1995; 95WO-US015516.
XX
XX 13-DEC-1994; 94US-00354920.
XX 23-DEC-1994; 94US-00363253.
XX 23-DEC-1994; 94US-00363254.
XX 17-FEB-1995; 95US-00390850.
XX 20-APR-1995; 95US-00426124.
XX 02-MAY-1995; 95US-00432874.
XX 04-MAY-1995; 95US-00434509.
XX 07-JUL-1995; 95US-0000951P.
XX 07-JUL-1995; 95US-0000974P.
XX 07-AUG-1995; 95US-00512861.
XX 05-OCT-1995; 95US-00541365.
XX
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Beigelman L, Stinchcomb DT, Jarvis T, Draper K, Pavco P;
XX Mswiggen J, Gustofson J, Usman N, Wincott F, Matulic-Adamic J;
XX Karpeisky A, Thompson JD, Modak A, Burgin A;
XX
XX WPI; 1996-300653/30.
XX
XX Enzymatic nucleic acid molecules having a hammer-head motif - used for
the treatment of arthritis, induction of graft tolerance or treatment of
auto-immune diseases.
XX
XX Claim 10; Page 198; 307pp; English.
XX
XX The present invention describes a novel enzymatic nucleic acid (ENA)
XX having a hammerhead motif (HM) comprising: (i) at least 5 ribose residues
XX; (ii) a 2'-C-allyl modification at position 4 of the ENA; (iii) at least
XX ten 2'-O-methyl modifications; and (iv) a 3'-end modification. The ENA's
XX can inhibit collagenase and stromelysin production in the synovial
XX membrane of joints for the treatment or prevention of arthritis,
XX particularly osteoarthritis or rheumatoid arthritis. The ENA's can also
XX be used to treat antigen presenting cells of a donor to induce tolerance
XX in a recipient to an alloantigen of a donor. They can also be used for
XX enhancing graft tolerance or for treating autoimmune disease, and for
XX treating allergies and other inflammatory conditions. The ENA's can also
XX be used in diagnosis. Ribozyme therapy impacts on the expression of
XX stromelysin without introducing the non-specific effects upon gene
XX expression which accompany treatment with retinoids and dexamethasone.
XX The concentration of ribozyme required to affect a therapeutic treatment
XX is lower than that required of antisense molecules, and is highly
XX specific. The present sequence is used in the exemplification of the
XX present invention

XX SQ Sequence 15 BP; 2 A; 4 C; 3 G; 0 T; 6 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 15;
 Best Local Similarity 46.2%; Pred. No. 1.2e+03;
 Matches 6; Conservative 5; Mismatches 2; Indels 0; Gaps 0;
 QY 934 CTCCTCTTCATTG 946
 |:|:|:|:|:|:|
 Db 3 CUGCUCAUCAUG 15
 RESULT 1299
 ID AAX66254/c
 XX AAX66254; RNA; 15 BP.
 AC AAX66254;
 XX
 DT 20-JUL-1999 (first entry)
 DE Mouse B7-2 hammerhead ribozyme target SEQ ID NO:2886.
 XX
 KW Arthritic condition; graft tolerance; immune response; target; cleavage;
 KW hammerhead ribozyme; hairpin ribozyme; human; rabbit; mouse; collagenase;
 KW stromelysin; synovial membrane; joint; arthritis; osteoarthritis;
 KW rheumatoid arthritis; autoimmune disease; allergy; inflammation;
 KW diagnosis; ss.
 XX
 OS Mus sp.
 XX
 PN WO9618736-A2.
 XX
 PD 20-JUN-1996.
 XX
 PF 22-NOV-1995; 95WO-US015516.
 XX
 PR 13-DEC-1994; 94US-00354920.
 PR 23-DEC-1994; 94US-00363253.
 PR 23-DEC-1994; 94US-00363254.
 PR 17-FEB-1995; 95US-00390850.
 PR 20-APR-1995; 95US-00426124.
 PR 02-MAY-1995; 95US-00432874.
 PR 04-MAY-1995; 95US-00434509.
 PR 07-JUL-1995; 95US-0009511P.
 PR 07-JUL-1995; 95US-000974P.
 PR 07-AUG-1995; 95US-00512861.
 PR 05-OCT-1995; 95US-00541365.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 XX
 PI Beigelman L, Stinchcomb DT, Jarvis T, Draper K, Pavco P;
 PI Mcswiggen J, Gustofson J, Usman N, Wincott F, Matulic-Adamic J;
 PI Karpeisky A, Thompson JD, Modak A, Burgin A;
 XX
 DR WPI; 1996-300653/30.
 XX
 PT Enzymatic nucleic acid molecules having a hammer-head motif - used for
 PT the treatment of arthritis, induction of graft tolerance or treatment of
 PT auto-immune diseases.
 XX
 PS Claim 10; Page 197; 307pp; English.
 XX
 CC The present invention describes a novel enzymatic nucleic acid (ENA)
 CC having a hammerhead motif (HM) comprising: (i) at least 5 ribose residues
 CC; (ii) a 2'-C-allyl modification at position 4 of the ENA; (iii) at least
 CC ten 2'-O-methyl modifications; and (iv) a 3'-end modification. The ENA's
 CC can inhibit collagenase and stromelysin production in the synovial
 CC membrane of joints for the treatment or prevention of arthritis,
 CC particularly osteoarthritis or rheumatoid arthritis. The ENA's can also
 CC be used to treat antigen presenting cells of a donor to induce tolerance
 CC in a recipient to an alloantigen of a donor. They can also be used for
 CC enhancing graft tolerance or for treating autoimmune disease, and for
 CC treating allergies and other inflammatory conditions. The ENA's can also

CC be used in diagnosis. Ribozyme therapy impacts on the expression of
 CC stromelysin without introducing the non-specific effects upon gene
 CC expression which accompany treatment with retinoids and dexamethasone.
 CC The concentration of ribozyme required to affect a therapeutic treatment
 CC is lower than that required of antisense molecules, and is highly
 CC specific. The present sequence is used in the exemplification of the
 CC present invention
 XX
 SQ Sequence 15 BP; 8 A; 2 C; 3 G; 0 T; 2 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 15;
 Best Local Similarity 84.6%; Pred. No. 1.2e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 938 TCTTCATTGGTTT 950
 |||||
 Db 14 TCTTCTAGGTTT 2
 RESULT 1299
 AAT49863
 ID AAT49863 standard; RNA; 15 BP.
 XX
 AC AAT49863;
 XX
 DT 07-MAR-1997 (first entry)
 XX
 DE Human CETP HH ribozyme target sequence #1564.
 XX
 KW Hammerhead ribozyme; cholesterol ester transfer protein; mRNA cleavage;
 KW neutral lipid transfer; plasma lipoprotein; atherosclerosis; athrectomy;
 KW reverse cholesterol transport; high density lipoprotein; therapy; CETP;
 KW familial hypercholesterolaemia; dyslipidaemia; hypoalphalipoproteinaemia;
 KW peripheral vascular disease; hyperbetalipoproteinaemia; RCT; inhibitor;
 KW angioplastic restenosis; low density lipoprotein; diabetes; HDL; human;
 KW LDL; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO9620279-A1.
 XX
 PD 04-JUL-1996.
 XX
 PF 11-DEC-1995; 95WO-US016000.
 XX
 PR 23-DEC-1994; 94US-00363240.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 PA (WARN) WARNER LAMBERT CO.
 XX
 PI Couture L, Stinchcomb D, Mcswiggen J, Bisgaier C, Page M;
 XX
 DR WPI; 1996-321852/32.
 XX
 PT New ribozyme(s) for cleaving cholesterol ester transfer protein mRNA -
 PT useful for preventing or treating initial development, progression or
 PT regression of vascular diseases, esp. familial hypercholesterolaemia.
 XX
 PS Claim 4; Page 33; 72pp; English.
 XX
 CC AAT49608-749863 represent target sequences for the human cholesterol
 CC ester transfer protein (CETP) hammerhead (HH) ribozymes (see AAT49881-
 CC T50137). CETP is a 74 kD glycoprotein that facilitates neutral lipid
 CC transfer between plasma lipoproteins. The numbering of the targets refers
 CC to the position of the cleavage site in full length CETP. The ribozyme UH
 CC binds to 5 nucleotides either side of this site, provided the sequence UH
 CC is immediately upstream. The ribozymes are able to cleave mRNA from the
 CC gene encoding CETP, thereby blocking synthesis and/or expression of the
 CC mRNA. By inhibiting CETP, the reverse cholesterol transport (RCT) pathway
 CC can be inhibited (or eliminated) thereby preventing the reduction in size
 CC density of the high density lipoproteins (HDL), prolonging HDL half life,
 CC and therefore increasing HDL levels. The ribozymes can be used to treat
 CC conditions associated with abnormal levels of CETP, specifically familial

hypercholesterolaemia, atherosclerosis, peripheral vascular disease, hyperbetaloproteinaemia, hypoalphalipoproteinaemia, dyslipidaemia, vascular complications of diabetes, transplant, atherectomy and angioplastic restenosis. By inhibiting CETP, the levels of HDL and low density lipoproteins (LDL), and the HDL:LDL ratio are favourably altered (a decrease in LDL levels, and a corresponding increase in HDL levels). The HH ribozymes can also be used diagnostically to study genetic drift and mutations in diseased cells, and to detect CETP mRNA. As the HH ribozymes target specific regions of the CETP gene, they have low non-specific activity

Sequence 15 BP; 1 A; 4 C; 4 G; 0 T; 6 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 15;
Best Local Similarity 38.5%; Pred. No. 1.2e+03;
Matches 5; Conservative 6; Mismatches 2; Indels 0; Gaps 0;

Y 915 TGGTCTTTGCTT 927
b 1 UGGACUUUGGCUU 13
: || |::: |::
: || |::: |::

ESULT 1300
AT49862
D AAT49862 standard; RNA; 15 BP.
X C AAT49862;
X 07-MAR-1997 (first entry)
X Human CETP HH ribozyme target sequence #1563.
X Hammerhead ribozyme; cholesterol ester transfer protein; mRNA cleavage;
W neutral lipid transfer; plasma lipoprotein; atherosclerosis; atherectomy;
W reverse cholesterol transport; high density lipoprotein; therapy; CETP;
W familial hypercholesterolaemia; dyslipidaemia; hypoalphalipoproteinaemia;
W peripheral vascular disease; hyperbetalipoproteinaemia; RCT; inhibitor;
W angioplastic restenosis; low density lipoprotein; diabetes; HDL; human;
W LDL; ss.
X Homo sapiens.
X WO9620279-A1.
X 04-JUL-1996.
X 11-DEC-1995; 95WO-US016000.
X 23-DEC-1994; 94US-00363240.
X (RIBO-) RIBOZYME PHARM INC.
X (WARN) WARNER LAMBERT CO.
X Couture L, Stinchcomb D, Mcswiggen J, Bisgaier C, Pape M;
X WPI; 1996-321852/32.
X New ribozyme(s) for cleaving cholesterol ester transfer protein mRNA -
PT useful for preventing or treating initial development, progression or
PT regression of vascular diseases, esp. familial hypercholesterolaemia.
X Claim 4; Page 33; 72pp; English.
X AAT49608-T49863 represent target sequences for the human cholesterol
X ester transfer protein (CETP) hammerhead (HH) ribozymes (see AAT49881-
X T50137). CETP is a 74 kD glycoprotein that facilitates neutral lipid
X transfer between plasma lipoproteins. The numbering of the targets refers
X to the position of the cleavage site in full length CETP. The ribozyme
X binds to 5 nucleotides either side of this site, provided the sequence UH
X is immediately upstream. The ribozymes are able to cleave mRNA from the
X gene encoding CETP, thereby blocking synthesis and/or expression of the
X mRNA. By inhibiting CETP, the reverse cholesterol transport (RCT) pathway
X can be inhibited (or eliminated) thereby preventing the reduction in size

density of the high density lipoproteins (HDL), prolonging HDL half life, and therefore increasing HDL levels. The ribozymes can be used to treat conditions associated with abnormal levels of CETP, specifically familial hypercholesterolaemia, atherosclerosis, peripheral vascular disease, hyperbetaloproteinaemia, hypoalphalipoproteinaemia, dyslipidaemia, vascular complications of diabetes, transplant, atherectomy and angioplastic restenosis. By inhibiting CETP, the levels of HDL and low density lipoproteins (LDL), and the HDL:LDL ratio are favourably altered (a decrease in LDL levels, and a corresponding increase in HDL levels). The HH ribozymes can also be used diagnostically to study genetic drift and mutations in diseased cells, and to detect CETP mRNA. As the HH ribozymes target specific regions of the CETP gene, they have low non-specific activity

Sequence 15 BP; 2 A; 3 C; 4 G; 0 T; 6 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 15;
Best Local Similarity 38.5%; Pred. No. 1.2e+03;
Matches 5; Conservative 6; Mismatches 2; Indels 0; Gaps 0;

QY 915 TGGTCTTTGCTT 927
Db 2 UGGACUUUGGCUU 14
: || |::: |::
: || |::: |::

RESULT 1301
AAX75743
ID AAX75743 standard; RNA; 15 BP.
X AAX75743;
X 28-JUL-1999 (first entry)
X Human flt-1 and KDR hammerhead ribozyme target site #77.
X Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
X KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
X tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
X fms-like tyrosine kinase 1; kinase insert domain containing receptor;
X foetal liver kinase 1; ss.
X Homo sapiens.
X WO9715662-A2.
X 01-MAY-1997.
X 25-OCT-1996; 96WO-US017480.
X 26-OCT-1995; 95US-0005974P.
X 11-JAN-1996; 96US-00584040.
X (RIBO-) RIBOZYME PHARM INC.
X (CHIR) CHIRON CORP.
X Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;
X WPI; 1997-259017/23.
X Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
X stability - useful for treating e.g. tumour angiogenesis, psoriasis,
X rheumatoid arthritis, etc., in a human patient.
X Example 9; Page 192; 218pp; English.
X The present invention describes nucleic acid molecules which modulate the
X synthesis, expression and/or stability of a mRNA encoding 1 or more
X receptors of vascular endothelial growth factor (VEGF). A patient
X (preferably human) having a condition associated with the level of the
X fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
X receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
X angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
X treated by administering the nucleic acid molecule or the expression

CC vector to the patient. AAX67275 to AAX75752 represent specific examples
 CC of nucleic acid molecules from the present invention
 XX

SQ Sequence 15 BP; 3 A; 4 C; 3 G; 0 T; 5 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 15;
 Best Local Similarity 46.2%; Pred. No. 1.2e+03;
 Matches 6; Conservative 5; Mismatches 2; Indels 0; Gaps 0;

QY 916 GGTCTTGGCTTT 928
 |||: ||| :
 Db 3 GGUCUAGCCAU 15

RESULT 1302

AA76173
 ID AAT76173 standard; DNA; 15 BP.

XX AAT76173;
 AC
 DT 12-SEP-1997 (first entry)
 XX Human IL3 receptor antisense oligonucleotide.
 DE
 XX Asthma; airway epithelium; adenosine free; cystic fibrosis;
 KW chronic obstructive pulmonary disease; bronchitis; interleukin; ss.
 XX
 OS Synthetic.

XX WO9640162-A1.

PN 19-DEC-1996.

XX 06-JUN-1996; 96WO-US009306.

XX 07-JUN-1995; 95US-00474497.

XX (UYEC-) UNIV EAST CAROLINA.

XX Nyce JW, Metzger WJ;

XX WPI; 1997-051871/05.

XX Treatment of airway diseases such as asthma - by topically applying
 PT adenosine-free antisense oligo:nucleotide to airway epithelium of
 PT subject.

XX Example 5; Page 29; 71pp; English.

XX A method for treating airway disease in a subject has been produced,
 CC which involves the topical administration of an essentially adenosine
 CC free antisense oligonucleotide (ON) to the airway epithelium of the
 CC subject. The present sequence is an antisense oligonucleotide specific
 CC for the human IL3 receptor. The method can be used to treat airway
 CC diseases such as cystic fibrosis, asthma, chronic obstructive pulmonary
 CC disease, bronchitis and other airway diseases characterised by an
 CC inflammatory response. By eliminating adenosine from the antisense ON,
 CC its liberation upon antisense degradation is prevented, thereby
 CC preventing adenosine-induced bronchoconstriction in patients with hyper-
 CC reactive airways

XX Sequence 15 BP; 0 A; 5 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 15;
 Best Local Similarity 84.6%; Pred. No. 1.2e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 938 TCTTCATTCGTTT 950
 ||||| |||||
 Db 1 TCTTCATTCGTTT 13

RESULT 1303

AAV49163/C
 ID AAV49163 standard; DNA; 15 BP.

XX AAV49163;
 AC

XX 15-OCT-1998 (first entry)
 DT

XX rb gene antisense oligonucleotide rb-N-111.
 DE

XX rb gene; antisense oligonucleotide; modulate; gene expression; ss.
 KW

XX Synthetic.

OS Homo sapiens.

XX EP856579-A1.

PN 05-AUG-1998.

XX 31-JAN-1997; 97EP-00101531.

XX 31-JAN-1997; 97EP-00101531.

XX (BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.

XX Schlingensiepen K, Brysch W;

XX WPI; 1998-400910/35.

XX Preparation of antisense oligo:nucleotide(s) which lack long runs of
 PT consecutive guanosine or inosine - and have specific ratio of residues
 PT able to form two or three hydrogen bonds, have greater activity and
 PT reduced toxicity, used therapeutically or to modulate growth of cells in
 PT culture.

XX Example 7; Fig 9c; 286pp; English.

XX AAV49008-236 represent antisense oligonucleotides directed against the rb
 CC gene. Of these, only oligonucleotides AAV49008-52 resulted in effective
 CC downregulation of negative growth control by rb, while oligonucleotides
 CC AAV49052-236 had little effect. The oligonucleotides exemplify the
 CC invention. The specification describes oligonucleotides that contain 8-30
 CC nucleotides, which contain at most 8 nucleotides that can each form three
 CC hydrogen bonds to cytosine; do not contain four consecutive nucleotides
 CC able to form three H-bonds each to four consecutive cytosines; do not
 CC contain two sequences of three consecutive nucleotides each able to form
 CC three H-bonds to three consecutive cytosines, and the ratio between
 CC residues able to form two H-bonds each (2R) or three such bonds (3R) is
 CC given by 2R/3R = 0.33-0.72. The oligonucleotides are used to modulate
 CC expression of genes, particularly the genes for p53, ErbB-2, JunB, JunD,
 CC TGF-beta 1 or beta 2 to control proliferation of primary cell cultures
 CC (e.g. bone marrow stem, liver or kidney cells, osteoclasts, osteoblasts
 CC and/or keratinocytes). The oligonucleotides can also be used to analyse
 CC function of proteins (by altering their expression or activity) and
 CC therapeutically, e.g. in cases of cancer or (targeting TGF) for
 CC stimulating the immune system

XX Sequence 15 BP; 10 A; 1 C; 1 G; 3 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 15;
 Best Local Similarity 84.6%; Pred. No. 1.2e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 909 TTTCTTTGCTCTT 921

Db 15 TTTATTGATCTT 3

RESULT 1304

AAX57567

ID AAX57567 standard; DNA; 15 BP.

XX AAX57567;

XX

```

I 16-JUL-1999 (first entry)
K Antisense oligo #6 to insulin-like growth factor I receptor.
X Antisense; human; insulin-like growth factor-1 receptor; IGF-IR;
W expression; inhibition; induction; apoptosis; tumour; liposome; ss.
X Synthetic.
S Homo sapiens.
X N WO9923259-A1.
X D 14-MAY-1999.
X F 03-NOV-1998; 98WO-US023418.
X R 04-NOV-1997; 97US-00963886.
X A (INEX-) INEX PHARM CORP.
I Zon G;
R WPI; 1999-313361/26.
X Human insulin-like growth factor-1 receptor gene antisense
T oligonucleotides.
X Disclosure; Page 16; 23pp; English.
X Sequences AAX57562-X57571 represent antisense oligonucleotides targeted
C to a region spanning 4-9 codons downstream of the AUG translation
C initiation codon of the human insulin-like growth factor-1 receptor (IGF-
C IR) gene. The antisense oligonucleotides inhibit the expression of IGF-
C IR, which in turn induces apoptosis, especially in a tumour cell. The
C oligonucleotides can be administered via a liposome
X
Q Sequence 15 BP; 2 A; 2 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 15;
Best Local Similarity 84.6%; Pred. No. 1.2e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Y 905 TCATTTCCTTGG 917
b 1 TCCTTTTATTGG 13

RESULT 1305
I AAX30949
D AAX30949 standard; DNA; 15 BP.
X AAX30949;
C AAX30949;
X 21-MAY-1999 (first entry)
X Tag sequence of a transcript increased in colorectal cancer.
X Tag sequence; colorectal cancer; pancreatic cancer; colon cancer;
W diagnosis; prognosis; treatment; ss.
X Homo sapiens.
X N WO9853319-A2.
X D 26-NOV-1998.
X F 20-MAY-1998; 98WO-US010277.
X R 21-MAY-1997; 97US-0047352P.
X A (UWJO ) UNIV JOHNS HOPKINS.
X Vogelstein B, Kinzler KW;

```

```

XX WPI; 1999-070161/06.
XX Use of isolated gene transcripts - useful for developing products for the
PT diagnosis, prognosis and treatment of cancers, particularly colon and
PT pancreatic cancer.
XX Claim 2; Page 22; 120pp; English.
XX AAX30947-31815 represent tag sequences of transcripts that are
CC differentially expressed in colorectal cancer. in pancreatic cancer, or
CC in both. The tag sequences can be used to identify genes by matching the
CC tag to a gen data base member, or by using the tag sequences as probes to
CC isolate unidentified genes from cDNA libraries. The tag sequences can
CC also be used in a method for diagnosing colon or pancreatic cancer in a
CC sample suspected of being neoplastic. The method comprises comparing the
CC level of at least one transcript in a first sample of a tissue to a
CC second sample, where the first sample is a colonic tissue suspected of
CC being neoplastic and the second sample is a normal human colonic tissue.
CC The transcript is identified by a tag selected from AAX30947-31815. The
CC methods of the invention can be used in the diagnosis, prognosis and
CC treatment of cancer
XX
SQ Sequence 15 BP; 3 A; 6 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 15;
Best Local Similarity 84.6%; Pred. No. 1.2e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 922 TGCCTTTTATCCC 934
Db 3 TGCCTGTATATCCC 15

RESULT 1306
I AAX53970
D AAX53970 standard; DNA; 15 BP.
X AAX53970;
X 05-JUL-1999 (first entry)
X Human IL-3 receptor antisense oligonucleotide fragment.
X Antisense oligonucleotide; multiple target; antisense treatment;
KW impaired respiration; inflammation; lung disease;
KW pulmonary vasoconstriction; inflammation; allergic rhinitis;
KW acute asthma; allergy; asthma; pain; cystic fibrosis;
KW respiratory distress syndrome; pain; cystic fibrosis;
KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;
KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
KW colon cancer; breast cancer; lung cancer; pancreatic cancer;
KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
KW prostate cancer; ss.
X Synthetic.
X N WO9913886-A1.
X D 25-MAR-1999.
X F 17-SEP-1998; 98WO-US019419.
X R 17-SEP-1997; 97US-0059160P.
X PR 09-JUN-1998; 98US-00093972.
X X (UVEC-) UNIV EAST CAROLINA.
X Nyce JW;
X WPI; 1999-229400/19.
X New antisense oligonucleotides used in treatment of, e.g. pulmonary
PT

```

PT vasoconstriction.
XX Disclosure; Page 48; 120pp; English.
XX
CC The specification describes antisense oligonucleotides (AA52869-X55271) directed against at least 2 mRNAs selected from target genes, coding and non-coding regions of RNAs corresponding to target genes, gene initiation codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-end and the juxta-section between coding and non-coding regions and all segments of RNAs encoding proteins associated with one or more diseases, conditions or mixtures. The antisense oligonucleotides may be derived from sequences AA55272-74. These multiple target oligonucleotides (specifically AA55180-271) can be used for the antisense treatment of diseases and conditions. Typical diseases and conditions are those associated with impaired respiration and inflammation, including lung diseases, pulmonary vasoconstriction, inflammation, including lung acute asthma, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, pulmonary hypertension, pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g. colon cancer, breast cancer, lung cancer, pancreatic cancer, hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as well as all types of cancers which may metastasize or have metastasized to the lungs, including breast and prostate cancer
XX
SQ Sequence 15 BP; 0 A; 5 C; 2 G; 8 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 15;
Best Local Similarity 84.8%; Pred. No. 1.2e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 938 TCTTCATGGTTT 950
DB 1 TCTTCATGGTTT 13
RESULT 1307
AA14755
ID AA14755 standard; DNA; 15 BP.
AC AA14755;
XX
JT 24-MAR-1999 (first entry)
XX Triple helix third strand of Hepatitis B virus nucleotides 2405-2419.
DE
XX Triple formation; DNA detection; triple helix; identification; bacteria; oncogene; virus; ss.
XX
OS Synthetic.
OS Hepatitis B virus.
XX
PN US5861244-A.
XX
PD 19-JAN-1999.
XX
PF 22-DEC-1993; 93US-00173489.
XX
PR 29-OCT-1992; 92US-00968436.
XX
PA (PROF-) PROFILE DIAGNOSTIC SCI INC.
XX
PI Hepburn AG, Wang C;
XX
DR WPI; 1999-130384/11.
XX Assay of genetic sequences based on triplex formation from double stranded analyte - and hybrid of anchor and reporter sequences, with reporter released if triplex formation occurs, used e.g. to identify bacteria.
XX
PS Disclosure; Col 17-18; 168pp; English.
XX

CC The present sequence represents a polynucleotide that is able to form a triple helix with a double stranded sequence. Cytosine bases in the present can be replaced with 5-methylcytosine for increased triplex stability. The present sequence is used in the assay of the invention, where it can be part of the anchor DNA or reporter DNA sequence. The assay comprises adding a sample containing double-stranded DNA test sequences to an aqueous medium containing at least one complex of an anchor DNA, attached to a solid support, and reporter DNA, where either a part of the anchor DNA or reporter DNA is designed to form a triple-strand structure with part of the test sequence. Triplex formation results in displacement of the reporter DNA which is detected as an indication of the presence of the DNA test sequence. The method is used to detect DNA sequences, particularly for identification of bacteria (by detecting genes for ribosomal RNA) in clinical samples, but also detection of oncogenes and Hepatitis B virus
XX

SQ Sequence 15 BP; 0 A; 9 C; 0 G; 6 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 15;
Best Local Similarity 84.8%; Pred. No. 1.2e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 924 CCTTTATCCCTC 936

DB 3 CCTTCTCCCTC 15

RESULT 1308
AA33414
ID AA33414 standard; DNA; 15 BP.
XX
AC AA33414;
XX

DT 28-JUL-2000 (first entry)

DE Low adenosine antisense oligonucleotide SEQ ID NO:1103.

XX Human; adenosine receptor; low adenosine antisense oligonucleotide; phosphorothioate; impaired respiration; inflammation; allergy;
KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
KW antiasthmatic; cytostatic; analgesic; impaired airway;
KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;
KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.

XX Homo sapiens.

OS WO200009525-A2.

PN 24-FEB-2000.

PF 03-AUG-1999; 99WO-US017712.

PR 03-AUG-1998; 98US-0095212P.

PA (UYEC-) UNIV EAST CAROLINA.

XX Nyce JW;

PI WPI; 2000-205971/18.

XX New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstriction, inflammation, allergies, asthma, hypertension, bronchitis, emphysema, respiratory distress syndrome, ischemia or cancers.

PS Claim 18; Page 403; 1343pp; English.

XX The present invention describes a new composition comprising an antisense oligonucleotide (ON) with low adenosine (up to 15%), which targets nucleic acids involved in bronchoconstriction, allergies, and/or inflammation. The ON can have antiinflammatory, antiallergic,

antihistaminic, cytostatic and analgesic activities. The compositions are useful for the treatment of diseases associated with inflammation, impaired airways, including lung disease and diseases whose secondary effects afflict the lungs of a subject. They can be used for treating e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma, impaired respiration, respiratory distress syndrome, pain, cystic fibrosis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease (COPD), and cancers such as leukaemias, lymphomas, carcinomas, and cancers which may metastasise to the lungs, including breast and prostate cancer. The reduction of the adenosine content of the ONS reduces side effects. The A-containing ONS break down with the release of deoxyadenosine which activates adenosine receptors causing bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the nucleotide sequences given in the sequence listing from the present invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185 sequences are also called SEQ ID NO:1 to 185, but the sequences differ from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to AAA33992) are specifically claimed ONS from the present invention. N.B. Sequences given in the disclosure of the present invention do not match up with their corresponding SEQ ID NO: sequences given in the sequence listing

Y 938 TCTTCATTGGTTT 950
b 1 TCTTCCTTGGTTT 13

Q Sequence 15 BP; 0 A; 5 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 15;
Best Local Similarity 84.6%; Pred. No. 1.2e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Y 938 TCTTCATTGGTTT 950
b 1 TCTTCCTTGGTTT 13

RESULT 1309
AAZ90250
D AAZ90250 standard; DNA; 15 BP.

Y 938 TCTTCATTGGTTT 950
b 1 TCTTCCTTGGTTT 13

22-MAY-2000 (first entry)

Oligonucleotide SEQ ID NO:4, used in molecular torch construction.

Molecular torch; fluorophore; quencher; hybridisation;
fluorescence signal; detection; quantification; target sequence; probe;
ss.

Synthetic.

Key	Location/Qualifiers
modified_base 1	/*tag= a
modified_base 15	/note= "Conjugated to polyethylene glycol (PEG) plus AAZ90251 to form strand 3"
modified_base 15	/*tag= b
modified_base 15	/note= "Conjugated to quencher DABCYL"

WO200001850-A2.
13-JAN-2000.
01-JUL-1999; 99WO-US015098.
02-JUL-1998; 98US-0091616P.
(GENP-) GEN-PROBE INC.
Becker MM, Schroth G;
WPI; 2000-182124/16.
New molecular torches for detecting a target nucleic acid in a sample,

comprise a target binding domain, a joining region and a target closing domain.

Example 1; Fig 6A; 58pp; English.

The invention relates to novel molecular torches comprising a target binding domain, a joining region, target closing domain, a fluorophore and a quencher. The molecular torches may be used in a novel method for determining whether a target nucleic acid sequence is present in a sample. In the absence of target nucleic acid, the target binding domain is hybridised to the target closing domain (a "closed torch"); the joining region facilitates formation of the target binding domain presence of the target nucleic acid, the target closing domain is preferentially hybridises with the target sequence, displacing the closing domain (an "open torch"). The binding domain is biased towards the target sequence such that the target binding domain forms a more stable hybrid with the target sequence than with the target closing domain under the same hybridisation conditions. This is achieved by the introduction of features which will destabilise binding domain/closing domain hybrids relative to the binding domain/target hybrid (e.g., mismatches, abasic sites or bulges). In the closed torch, the fluorophore and quencher are in close proximity, meaning that no fluorescence signal is produced. On hybridisation of the target binding domain to the target sequence, the fluorophore and quencher are separated, enabling a signal to be produced. The molecular torches and methods of the invention can be used to detecting the presence of target nucleic acid sequences in samples (e.g., for diagnosis). They can also be used for quantifying the amount of target which may be present in a sample. Sequences AAZ90247-AAZ90252 represent nucleic acid sequences which are component parts of the strands used to construct molecular torches 1-4 used in an exemplification of the present invention

Sequence 15 BP; 0 A; 5 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 15;
Best Local Similarity 84.6%; Pred. No. 1.2e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Y 908 TTTTCTTTGGTCT 920
b 2 TTTTCTTTGGTCT 14

RESULT 1310

AAZ06104/C
ID AAZ06104 standard; DNA; 15 BP.

Y 908 TTTTCTTTGGTCT 920
b 2 TTTTCTTTGGTCT 14

14-JUN-2000 (first entry)

CFTFR gene analysis oligonucleotide probe SEQ ID NO:114.

CFTFR; cystic fibrosis transmembrane conductance regulator; detection; mutation; probe; human; hybridisation; ss.

Homo sapiens.

US6027880-A.

22-FEB-2000.

10-OCT-1995; 95US-00544381.

26-OCT-1993; 93US-00143312.

02-AUG-1994; 94US-00284064.

26-OCT-1994; 94WO-US012305.

02-AUG-1995; 95US-00510521.

(AFFY-) AFFYMETRIX INC.

Huang XC, Chee M, Lobban PE, Hubbell EA, Sheldon EL, Miyada CG;
Cronin MT, Lipschutz RJ, Morris MS, Fodor SPA;

XX WPI; 2000-194825/17.
 XX An array of nucleic acid probes immobilized on a solid support, useful
 PT for identifying mutations in the cystic fibrosis transmembrane
 PT conductance regulator.
 XX
 PS Disclosure; Col 107; 114pp; English.
 XX
 XX The present invention describes an array of nucleic acid probes
 CC immobilised on a solid support, which comprises: (1) a first probe set,
 CC comprising probes with a segment of at least 6 nucleotides complementary
 CC to the CFTR (cystic fibrosis transmembrane conductance regulator) gene,
 CC where the segment includes at least 1 interrogation position
 CC complementary to a nucleotide in the CFTR gene sequence; and (2) second,
 CC third and fourth probe sets, each comprising probes identical to those in
 CC the first probe set, each comprising probes identical to those in
 CC the first probe set. AA05991 to AAA06240 represent CFTR gene analysis
 CC oligonucleotide probes for use in the exemplification of the present
 CC invention. The present invention also describes a method of comparing a
 CC target nucleic acid with a reference sequence consisting of a
 CC predetermined sequence of nucleotides, comprising: (a) hybridising a
 CC sample comprising the target nucleic acid to an array of nucleic acid
 CC probes immobilised on a solid support; (b) comparing the relative
 CC specific binding of two corresponding probes from the first and second
 CC probe sets; (c) assigning a nucleotide in the target sequence as the
 CC complement of the interrogation position of the probe having the greater
 CC specific binding; and (d) repeating (b) and (c) by comparing the relative
 CC specific binding of a further two corresponding probes from the first and
 CC second probe sets until each nucleotide of interest in the target
 CC sequence has been assigned. The array is useful for analysis of the CFTR
 CC gene, e.g. detection of mutations
 XX
 SQ Sequence 15 BP; 7 A; 3 C; 2 G; 3 T; 0 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 15;
 Best Local Similarity 84.6%; Pred. No. 1.2e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 JY 938 TCTTCATTGGTTT 950
 Db 14 TCATCATTGGTGT 2
 RESULT 1311
 AAF19536
 ID AAF19536 standard; DNA; 15 BP.
 XX AAF19536;
 AC AAF19536;
 XX
 PT 14-MAR-2001 (first entry)
 XX
 XX Human IL3 receptor polynucleotide fragment #1103.
 XX
 XX Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
 XX human; airway disorder; bronchoconstriction; lung inflammation;
 XX surfactant depletion; respiratory; bronchodilator; antiinflammatory;
 XX immunosuppressive; antiasthmatic; analgesic; hypotensive; cycostatic;
 XX respiratory obstruction; pulmonary obstruction; impeded respiration;
 XX surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
 XX respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
 XX pulmonary hypertension; emphysema; pulmonary transplantation rejection;
 XX chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
 XX cancer; ss.
 XX
 CS Homo sapiens.
 XX
 EN WO200062736-A2.
 XX
 PD 26-OCT-2000.
 XX
 XX 24-MAR-2000; 2000WO-US008020.
 XX

PR 06-APR-1999; 99US-0127958P.
 XX (UYEC-) UNIV EAST CAROLINA.
 PA (NYCE/) NYCE J W.
 XX
 PI Nyce JW;
 XX
 DR WPI; 2000-679539/66.
 XX
 XX Low adenosine (A) content antisense oligonucleotides which do not trigger
 PT adenosine receptors during metabolism, useful e.g. for treating cancers
 PT and respiratory obstructions.
 XX
 PS Claim 14; Page 207; 1592pp; English.
 XX
 XX The present invention describes low adenosine (A) content antisense
 CC oligonucleotides and compositions (I) comprising them. In the antisense
 CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
 CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
 CC immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
 CC The antisense oligonucleotides and (I) can be used to down-regulate the
 CC expression and/or activity of target polypeptides associated with
 CC lung/respiratory disorders and malignancies, such as stimulating and
 CC activating peptide factors and transmitters, transcription factors,
 CC immunoglobulins and antibodies, antibody receptors, cytokines and
 CC chemokines, endogenously produced specific and non-specific enzymes,
 CC binding proteins, adhesion molecules and their receptors, cytokine and
 CC chemokine receptors, adenosine receptors, bradykinin receptors, central
 CC nervous system (CNS) and peripheral nervous and non-nervous system
 CC receptors, CNS and peripheral nervous and non-nervous system peptide
 CC transmitters, defensins, growth factors, vasoactive peptides and
 CC receptors, binding proteins and malignancy associated proteins. The
 CC antisense oligonucleotides may be used in this way to treat disorders
 CC including respiratory obstruction (especially pulmonary obstruction
 CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
 CC surfactant hypoproduction which are associated with a disease or
 CC condition selected from pulmonary vasoconstriction, inflammation,
 CC allergies, asthma, impeded respiration, respiratory distress syndrome
 CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
 CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
 CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
 CC fragments and antisense oligonucleotides used in the exemplification of
 CC the present invention
 XX
 SQ Sequence 15 BP; 0 A; 5 C; 2 G; 8 T; 0 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 15;
 Best Local Similarity 84.6%; Pred. No. 1.2e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 938 TCTTCATTGGTTT 950
 Db 1 TCTTCATTGGTTT 13
 RESULT 1312
 AAF52180/c
 ID AAF52180 standard; DNA; 15 BP.
 XX AAF52180;
 AC AAF52180;
 XX
 XX 30-MAR-2001 (first entry)
 XX
 XX IGF-I oligonucleotide #3140.
 XX
 XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
 XX cycostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
 XX skin disorder; insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
 XX IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
 XX growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
 XX keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
 XX hyperneovascular condition; hyperplasia; kidney disease;


```

PF 21-JUN-2000; 2000WO-AU000693.
XX
XX
PR 21-JUN-1999; 99US-0140345P.
XX
XX
PA (MURD-) MURDOCH CHILDRENS RES INST.
XX
XX
PI Wraight CJ, Werther GA, Edmondson SR;
XX
XX
DR WPI; 2001-041421/05.
XX
XX
PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT UV (ultra-violet) treatment (optional) and an antisenese nucleic acid that
PT inhibits or reduces growth factor mediated cell proliferation and/or
PT inflammation.
XX
XX
PS Example 8; Page 75; 201pp; English.
XX
XX
CC The present invention relates to a method for ameliorating the effects of
CC skin disorders. The method comprises contacting the skin with an
CC antisenese oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC inhibiting or reducing growth factor mediated cell proliferation,
CC inflammation and/or other disorders. The present sequence is an
CC oligonucleotide which can be used to design the antisenese
CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC F45161). The method is useful for ameliorating the effects of psoriasis,
CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC hyperneovascular condition such as a neovascular condition of the retina,
CC brain or skin, growth factor-mediated malignancies, other sclerotic
CC disease, kidney disease, hyperproliferation of the inside of blood
CC vessels or any other hyperplasia
XX
XX
SQ Sequence 15 BP; 5 A; 1 C; 8 G; 1 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 15;
Best Local Similarity 84.6%; Pred. No. 1.2e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 930 ATCCCTCCCTTC 942
Db ||||| |||||
14 ATCTCTCCGCTTC 2

RESULT 1315
AAF51296/c
ID AAF51296 standard; DNA; 15 BP.
XX
XX
AC AAF51296;
XX
XX
DT 30-MAR-2001 (first entry)
XX
XX
DE IGF-I oligonucleotide #2256.
XX
XX
KW Antisenese therapy; antiproliferative; antiinflammatory; antipsoriatic;
XX cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
XX skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
XX IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
XX growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
XX keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
XX hyperneovascular condition; hyperplasia; kidney disease;
XX neovascular condition of the retina; ss.
XX
XX
OS Homo sapiens.
XX
XX
PN WO200078341-A1.
XX
XX
PD 28-DEC-2000.
XX
XX
PF 21-JUN-2000; 2000WO-AU000693.
XX
XX
PR 21-JUN-1999; 99US-0140345P.
XX
XX
PA (MURD-) MURDOCH CHILDRENS RES INST.
XX
XX
PI Wraight CJ, Werther GA, Edmondson SR;
XX

```

R WPI; 2001-041421/05.

X Ameliorating the effects of a disorder, e.g. psoriasis, by administering

I UV (ultra-violet) treatment (optional) and an antisenase nucleic acid that

T inhibits or reduces growth factor mediated cell proliferation and/or

T inflammation.

X Example 8; Page 67; 201pp; English.

S The present invention relates to a method for ameliorating the effects of

X skin disorders. The method comprises contacting the skin with an

C antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1

C receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of

C inhibiting or reducing growth factor mediated cell proliferation,

C inflammation and/or other disorders. The present sequence is an

C oligonucleotide which can be used to design the antisense

C oligonucleotides of the present invention (see AAF45151 and AAF45153-

C F45161). The method is useful for ameliorating the effects of psoriasis,

C ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,

C neoplasias, scleroderma, warts, benign growths, cancers of the skin, a

C hyperneovascular condition such as a neovascular condition of the retina,

C brain or skin, growth factor-mediated malignancies, other sclerotic

C disease, kidney disease, hyperproliferation of the inside of blood

C vessels or any other hyperplasia

X Sequence 15 BP; 2 A; 3 C; 2 G; 3 T; 0 U; 0 Other;

SQ Query Match 13.4%; Score 9.8; DB 1; Length 15;

Best Local Similarity 84.6%; Pred. No. 1.2e+03;

Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 911 TCTTTGGTCTTTG 923

Db ||| ||||| |||

3 TCTTCCCTCATC 15

RESULT 1317

AAF53790

ID AAF53790 standard; DNA; 15 BP.

AC AAF53790;

XX 30-MAR-2001 (first entry)

XX IGF-I oligonucleotide #4750.

XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;

XX cytosstatic; dermatological; cardiant; virucide; ophthalmological; keloid;

XX skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;

XX IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;

XX growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;

XX keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;

XX hyperneovascular condition; hyperplasia; kidney disease;

XX neovascular condition of the retina; ss.

XX Homo sapiens.

XX WO200078341-A1.

XX 28-DEC-2000.

XX 21-JUN-2000; 2000WO-AU000693.

XX 21-JUN-1999; 99US-0140345P.

XX (MURD-) MURDOCH CHILDRENS RES INST.

XX Wright CJ, Werther GA, Edmondson SR;

XX WPI; 2001-041421/05.

XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering

PT UV (ultra-violet) treatment (optional) and an antisenase nucleic acid that

PT inhibits or reduces growth factor mediated cell proliferation and/or

PT inflammation.

PS Example 8; Page 67; 201pp; English.

PT inhibits or reduces growth factor mediated cell proliferation and/or

PT inflammation.

XX Example 8; Page 91; 201pp; English.

XX The present invention relates to a method for ameliorating the effects of

CC skin disorders. The method comprises contacting the skin with an

CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1

CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of

CC inhibiting or reducing growth factor mediated cell proliferation,

CC inflammation and/or other disorders. The present sequence is an

CC oligonucleotide which can be used to design the antisense

CC oligonucleotides of the present invention (see AAF45151 and AAF45153-

CC F45161). The method is useful for ameliorating the effects of psoriasis,

CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,

CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a

CC hyperneovascular condition such as a neovascular condition of the retina,

CC brain or skin, growth factor-mediated malignancies, other sclerotic

CC disease, kidney disease, hyperproliferation of the inside of blood

CC vessels or any other hyperplasia

XX Sequence 15 BP; 2 A; 3 C; 2 G; 3 T; 0 U; 0 Other;

SQ Query Match 13.4%; Score 9.8; DB 1; Length 15;

Best Local Similarity 84.6%; Pred. No. 1.2e+03;

Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 911 TCTTTGGTCTTTG 923

Db ||| ||||| |||

14 TCAATGGCTTTG 2

RESULT 1317

AAF53790

ID AAF53790 standard; DNA; 15 BP.

AC AAF53790;

XX 30-MAR-2001 (first entry)

XX IGF-I oligonucleotide #4750.

XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;

XX cytosstatic; dermatological; cardiant; virucide; ophthalmological; keloid;

XX skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;

XX IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;

XX growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;

XX keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;

XX hyperneovascular condition; hyperplasia; kidney disease;

XX neovascular condition of the retina; ss.

XX Homo sapiens.

XX WO200078341-A1.

XX 28-DEC-2000.

XX 21-JUN-2000; 2000WO-AU000693.

XX 21-JUN-1999; 99US-0140345P.

XX (MURD-) MURDOCH CHILDRENS RES INST.

XX Wright CJ, Werther GA, Edmondson SR;

XX WPI; 2001-041421/05.

XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering

PT UV (ultra-violet) treatment (optional) and an antisenase nucleic acid that

XX The present invention relates to a method for ameliorating the effects of
 CC skin disorders. The method comprises contacting the skin with an
 CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
 CC inhibiting or reducing growth factor mediated cell proliferation,
 CC inflammation and/or other disorders. The present sequence is an
 CC oligonucleotide which can be used to design the antisense
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
 CC F45161). The method is useful for ameliorating the effects of psoriasis,
 CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
 CC hyperneovascular condition such as a neovascular condition of the retina,
 CC brain or skin, growth factor-mediated malignancies, other sclerotic
 CC disease, kidney disease, hyperproliferation of the inside of blood
 CC vessels or any other hyperplasia
 XX
 SQ Sequence 15 BP; 6 A; 3 C; 2 G; 4 T; 0 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 15;
 Best Local Similarity 84.6%; Pred. No. 1.2e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 911 TCATTGGCTCTTG 923
 DB 13 TCAATGGCTCTTG 1
 RESULT 1319
 AAF49071/c
 ID AAF49071 standard; DNA; 15 BP.
 AC AAF49071;
 XX
 DT 30-MAR-2001 (first entry)
 XX
 DE IGF-I oligonucleotide #31.
 XX
 KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
 KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
 KW hyperneovascular condition; hyperplasia; kidney disease;
 KW neovascular condition of the retina; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200078341-A1.
 XX
 PD 28-DEC-2000.
 XX
 PF 21-JUN-2000; 2000WO-AU000693.
 XX
 PR 21-JUN-1999; 99US-0140345P.
 XX
 PA (MURD-) MURDOCH CHILDRENS RES INST.
 XX
 PI Wright CJ, Werther GA, Edmondson SR;
 XX
 UR WPI; 2001-041421/05.
 XX
 PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering
 PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
 PT inhibits or reduces growth factor mediated cell proliferation and/or
 PT inflammation.
 XX
 PS Example 8; Page 61; 201pp; English.
 XX
 CC The present invention relates to a method for ameliorating the effects of
 CC skin disorders. The method comprises contacting the skin with an
 CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1

CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
 CC inhibiting or reducing growth factor mediated cell proliferation,
 CC inflammation and/or other disorders. The present sequence is an
 CC oligonucleotide which can be used to design the antisense
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
 CC F45161). The method is useful for ameliorating the effects of psoriasis,
 CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
 CC hyperneovascular condition such as a neovascular condition of the retina,
 CC brain or skin, growth factor-mediated malignancies, other sclerotic
 CC disease, kidney disease, hyperproliferation of the inside of blood
 CC vessels or any other hyperplasia
 XX
 SQ Sequence 15 BP; 8 A; 3 C; 2 G; 2 T; 0 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 15;
 Best Local Similarity 84.6%; Pred. No. 1.2e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 905 TCATTTCCTTGG 917
 DB 15 TCCTTTTATTGG 3
 RESULT 1320
 AAF52176/c
 ID AAF52176 standard; DNA; 15 BP.
 AC AAF52176;
 XX
 DT 30-MAR-2001 (first entry)
 XX
 DE IGF-I oligonucleotide #3136.
 XX
 KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
 KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
 KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
 KW hyperneovascular condition; hyperplasia; kidney disease;
 KW neovascular condition of the retina; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200078341-A1.
 XX
 PD 28-DEC-2000.
 XX
 PF 21-JUN-2000; 2000WO-AU000693.
 XX
 PR 21-JUN-1999; 99US-0140345P.
 XX
 PA (MURD-) MURDOCH CHILDRENS RES INST.
 XX
 PI Wright CJ, Werther GA, Edmondson SR;
 XX
 UR WPI; 2001-041421/05.
 XX
 PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering
 PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
 PT inhibits or reduces growth factor mediated cell proliferation and/or
 PT inflammation.
 XX
 PS Example 8; Page 81; 201pp; English.
 XX
 CC The present invention relates to a method for ameliorating the effects of
 CC skin disorders. The method comprises contacting the skin with an
 CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
 CC inhibiting or reducing growth factor mediated cell proliferation,
 CC inflammation and/or other disorders. The present sequence is an
 CC oligonucleotide which can be used to design the antisense

oligonucleotides of the present invention (see AAF45151 and AAF45153-
F45161). The method is useful for ameliorating the effects of psoriasis,
ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
hyperneovascular condition such as a neovascular condition of the retina,
brain or skin, growth factor-mediated malignancies, other sclerotic
disease, kidney disease, hyperproliferation of the inside of blood
vessels or any other hyperplasia

Sequence 15 BP; 6 A; 3 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 15;
Best Local Similarity 84.6%; Pred. No. 1.2e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Y 942 CATTGGTTTAATG 954
||| ||| ||| ||| |||
b 15 CACTGTTTAATG 3

RESULT 1321
AAF47626/c
D AAF47626 standard; DNA; 15 BP.

X C AAF47626;

T 30-MAR-2001 (first entry)

E IGFBP3 oligonucleotide #1046.

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
hyperneovascular condition; hyperplasia; kidney disease;
neovascular condition of the retina; ss.

S Homo sapiens.

X WO200078341-A1.

D 28-DEC-2000.

F 21-JUN-2000; 2000WO-AU000693.

R 21-JUN-1999; 99US-0140345P.

X (MURD-) MURDOCH CHILDRENS RES INST.

A Wright CJ, Werther GA, Edmondson SR;

X WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering
UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
inhibits or reduces growth factor mediated cell proliferation and/or
inflammation.

Example 7; Page 51; 201pp; English.

The present invention relates to a method for ameliorating the effects of
skin disorders. The method comprises contacting the skin with an
antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
inhibiting or reducing growth factor mediated cell proliferation,
inflammation and/or other disorders. The present sequence is an
oligonucleotide which can be used to design the antisense
oligonucleotides of the present invention (see AAF45151 and AAF45153-
F45161). The method is useful for ameliorating the effects of psoriasis,
ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
neoplasias, scleroderma, warts, benign growths, cancers of the skin, a

hyperneovascular condition such as a neovascular condition of the retina,
brain or skin, growth factor-mediated malignancies, other sclerotic
disease, kidney disease, hyperproliferation of the inside of blood
vessels or any other hyperplasia

Sequence 15 BP; 6 A; 4 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 13.4%; Score 9.8; DB 1; Length 15;
Best Local Similarity 84.6%; Pred. No. 1.2e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 901 CTGGTCATTTCT 913
||||| ||| |||
Db 13 CTGGTCATGTCCT 1

RESULT 1322
AAF53516
ID AAF53516 standard; DNA; 15 BP.

XX AAF53516;

XX 30-MAR-2001 (first entry)

DE IGF-I oligonucleotide #4476.

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
hyperneovascular condition; hyperplasia; kidney disease;
neovascular condition of the retina; ss.

OS Homo sapiens.

XX WO200078341-A1.

XX 28-DEC-2000.

XX 21-JUN-2000; 2000WO-AU000693.

XX 21-JUN-1999; 99US-0140345P.

XX (MURD-) MURDOCH CHILDRENS RES INST.

XX Wright CJ, Werther GA, Edmondson SR;

XX WPI; 2001-041421/05.

Ameliorating the effects of a disorder, e.g. psoriasis, by administering
UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
inhibits or reduces growth factor mediated cell proliferation and/or
inflammation.

Example 8; Page 90; 201pp; English.

The present invention relates to a method for ameliorating the effects of
skin disorders. The method comprises contacting the skin with an
antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
inhibiting or reducing growth factor mediated cell proliferation,
inflammation and/or other disorders. The present sequence is an
oligonucleotide which can be used to design the antisense
oligonucleotides of the present invention (see AAF45151 and AAF45153-
F45161). The method is useful for ameliorating the effects of psoriasis,
ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
hyperneovascular condition such as a neovascular condition of the retina,
brain or skin, growth factor-mediated malignancies, other sclerotic
disease, kidney disease, hyperproliferation of the inside of blood
vessels or any other hyperplasia

XX SQ Sequence 15 BP; 0 A; 7 C; 0 G; 8 T; 0 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 15;
 Best Local Similarity 84.6%; Pred. No. 1.2e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 928 TTATCCCTCCTCT 940
 |||||
 1 TTCTCTCTCTCT 13

Db

RESULT 1323
 AAF49072/c
 ID AAF49072 standard; DNA; 15 BP.
 XX AC AAF49072;
 XX DT 30-MAR-2001 (first entry)
 XX DE IGF-I oligonucleotide #32.
 XX KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
 KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
 KW growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
 KW hyperneovascular condition; hyperplasia; kidney disease;
 KW neovascular condition of the retina; ss.
 XX OS Homo sapiens.
 XX PN WO200078341-A1.
 XX PD 28-DEC-2000.
 XX PF 21-JUN-2000; 2000WO-AU0000693.
 XX PR 21-JUN-1999; 99US-0140345P.
 XX PA (MURD-) MURDOCH CHILDRENS RES INST.
 XX PI Wright CJ, Werther GA, Edmondson SR;
 XX WPI; 2001-041421/05.
 XX DR Ameliorating the effects of a disorder, e.g. psoriasis, by administering
 XX UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
 XX inhibits or reduces growth factor mediated cell proliferation and/or
 XX inflammation.
 XX PS Example 8; Page 61; 201pp; English.
 XX CC The present invention relates to a method for ameliorating the effects of
 CC skin disorders. The method comprises contacting the skin with an
 CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
 CC inhibiting or reducing growth factor mediated cell proliferation,
 CC inflammation and/or other disorders. The present sequence is an
 CC oligonucleotide which can be used to design the antisense
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
 CC F45161). The method is useful for ameliorating the effects of psoriasis,
 CC ichthyosis, ptyriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
 CC hyperneovascular condition such as a neovascular condition of the retina,
 CC brain or skin, growth factor-mediated malignancies, other sclerotic
 CC disease, kidney disease, hyperproliferation of the inside of blood
 CC vessels or any other hyperplasia
 XX SQ Sequence 15 BP; 9 A; 3 C; 2 G; 1 T; 0 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 15;

Best Local Similarity 84.6%; Pred. No. 1.2e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 905 TCATTTTCTTTGG 917
 |||||
 14 TCCTTTATTTGG 2

Db

RESULT 1324
 AAF50094/c
 ID AAF50094 standard; DNA; 15 BP.
 XX AC AAF50094;
 XX DT 30-MAR-2001 (first entry)
 XX DE IGF-I oligonucleotide #1054.
 XX KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
 KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
 KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;
 KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
 KW growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
 KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
 KW hyperneovascular condition; hyperplasia; kidney disease;
 KW neovascular condition of the retina; ss.
 XX OS Homo sapiens.
 XX PN WO200078341-A1.
 XX PD 28-DEC-2000.
 XX PF 21-JUN-2000; 2000WO-AU0000693.
 XX PR 21-JUN-1999; 99US-0140345P.
 XX PA (MURD-) MURDOCH CHILDRENS RES INST.
 XX PI Wright CJ, Werther GA, Edmondson SR;
 XX WPI; 2001-041421/05.
 XX DR Ameliorating the effects of a disorder, e.g. psoriasis, by administering
 XX UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
 XX inhibits or reduces growth factor mediated cell proliferation and/or
 XX inflammation.
 XX PS Example 8; Page 67; 201pp; English.
 XX CC The present invention relates to a method for ameliorating the effects of
 CC skin disorders. The method comprises contacting the skin with an
 CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
 CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
 CC inhibiting or reducing growth factor mediated cell proliferation,
 CC inflammation and/or other disorders. The present sequence is an
 CC oligonucleotide which can be used to design the antisense
 CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
 CC F45161). The method is useful for ameliorating the effects of psoriasis,
 CC ichthyosis, ptyriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
 CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
 CC hyperneovascular condition such as a neovascular condition of the retina,
 CC brain or skin, growth factor-mediated malignancies, other sclerotic
 CC disease, kidney disease, hyperproliferation of the inside of blood
 CC vessels or any other hyperplasia
 XX SQ Sequence 15 BP; 9 A; 3 C; 1 G; 2 T; 0 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 15;
 Best Local Similarity 84.6%; Pred. No. 1.2e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 915 TGGTCTTGCTT 927

RESULT 1326
AAF50093/c
ID AAF50093 standard; DNA; 15 BP.
XX
AC
XX AAF50093;
DT 30-MAR-2001 (first entry)
XX
DE IGF-I oligonucleotide #1053.
XX
KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW IGF binding protein; IGFBP3; inflammation; psoriasis; pilaris;
KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW hyperneovascular condition; hyperplasia; kidney disease;
XX neovascular condition of the retina; ss.
OS Homo sapiens.
XX
PN W0200078341-A1.
XX
PD 28-DEC-2000.
XX
PF 21-JUN-2000; 2000WO-AU000693.
XX
PR 21-JUN-1999; 99US-0140345P.
XX
PA (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI Wright CJ, Werther GA, Edmondson SR;
XX
DR WPI; 2001-041421/05.
XX
PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT inhibits or reduces growth factor mediated cell proliferation and/or
PT inflammation.
XX
PS Example 8; Page 67; 201pp; English.
XX
CC The present invention relates to a method for ameliorating the effects of
CC skin disorders. The method comprises contacting the skin with an
CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC inhibiting or reducing growth factor mediated cell proliferation,
CC inflammation and/or other disorders. The present sequence is an
CC oligonucleotide which can be used to design the antisense
CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC F45161). The method is useful for ameliorating the effects of psoriasis,
CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC hyperneovascular condition such as a neovascular condition of the retina,
CC brain or skin, growth factor-mediated malignancies, other sclerotic
CC disease, kidney disease, hyperproliferation of the inside of blood
CC vessels or any other hyperplasia
SQ Sequence 15 BP; 9 A; 3 C; 2 G; 1 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 15;
Best Local Similarity 84.6%; Pred. No. 1.2e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 915 TGGTCTTTCCTT 927
DB 14 TGGTCTTTCCTT 2
RESULT 1327
AAF53791
ID AAF53791 standard; DNA; 15 BP.
XX

13 TGGTCTTTCCTT 1
RESULT 1325
AAF49073/c
J AAF49073 standard; DNA; 15 BP.
X
X AAF49073;
X
X 30-MAR-2001 (first entry)
X
X IGF-I oligonucleotide #33.
X
W Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
W cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
W skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
W IGF binding protein; IGFBP3; inflammation; psoriasis; pilaris;
W growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
W keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
W hyperneovascular condition; hyperplasia; kidney disease;
W neovascular condition of the retina; ss.
X
X Homo sapiens.
S
N W0200078341-A1.
X
D 28-DEC-2000.
X
F 21-JUN-2000; 2000WO-AU000693.
X
R 21-JUN-1999; 99US-0140345P.
X
A (MURD-) MURDOCH CHILDRENS RES INST.
X
I Wright CJ, Werther GA, Edmondson SR;
X
R WPI; 2001-041421/05.
X
X Ameliorating the effects of a disorder, e.g. psoriasis, by administering
X UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
X inhibits or reduces growth factor mediated cell proliferation and/or
X inflammation.
X
X Example 8; Page 61; 201pp; English.
X
X The present invention relates to a method for ameliorating the effects of
X skin disorders. The method comprises contacting the skin with an
X antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
X receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
X inhibiting or reducing growth factor mediated cell proliferation,
X inflammation and/or other disorders. The present sequence is an
X oligonucleotide which can be used to design the antisense
X oligonucleotides of the present invention (see AAF45151 and AAF45153-
X F45161). The method is useful for ameliorating the effects of psoriasis,
X ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
X neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
X hyperneovascular condition such as a neovascular condition of the retina,
X brain or skin, growth factor-mediated malignancies, other sclerotic
X disease, kidney disease, hyperproliferation of the inside of blood
X vessels or any other hyperplasia
X
X Sequence 15 BP; 9 A; 2 C; 2 G; 2 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 15;
Best Local Similarity 84.6%; Pred. No. 1.2e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
2Y 905 TCATTTCCTTTCG 917
DB 13 TCCTTTTATTGG 1


```

AC AAF53791;
XX
DT 30-MAR-2001 (first entry)
XX
DE IGF-I oligonucleotide #4751.
XX
XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
XX cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
XX skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;
XX IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
XX growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
XX keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
XX hyperneovascular condition; hyperplasia; kidney disease;
XX neovascular condition of the retina; ss.
XX
OS Homo sapiens.
XX
XX WO200078341-A1.
XX
PD 28-DEC-2000.
XX
PF 21-JUN-2000; 2000WO-AU000693.
XX
PF 21-JUN-1999; 99US-0140345P.
XX
PR (MURD-) MURDOCH CHILDRENS RES INST.
XX
PA Wright CJ, Werther GA, Edmondson SR;
XX WPI; 2001-041421/05.
XX
PI Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT inhibits or reduces growth factor mediated cell proliferation and/or
PT inflammation.
XX
PS Example 8; Page 91; 201pp; English.
XX
XX The present invention relates to a method for ameliorating the effects of
XX skin disorders. The method comprises contacting the skin with an
XX antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
XX receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
XX inhibiting or reducing growth factor mediated cell proliferation,
XX inflammation and/or other disorders. The present sequence is an
XX oligonucleotide which can be used to design the antisense
XX oligonucleotides of the present invention (see AAF45151 and AAF45153-
XX F45161). The method is useful for ameliorating the effects of psoriasis,
XX ichthyosis, ptyriasis, ruba, pilaris, serborrhea, keloids, keratosis,
XX neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
XX hyperneovascular condition such as a neovascular condition of the retina,
XX brain or skin, growth factor-mediated malignancies, other sclerotic
XX disease, kidney disease, hyperproliferation of the inside of blood
XX vessels or any other hyperplasia
XX
SQ Sequence 15 BP; 1 A; 7 C; 1 G; 6 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 15;
Best Local Similarity 84.6%; Pred. No. 1.2e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Cy 927 TTTATCCCTCCTC 939
Cb 2 TTTCTCCCTCCTC 14

RESULT 1328
AAF50096/c
ID AAF50096 standard; DNA; 15 BP.
AC AAF50096;
XX
XX 30-MAR-2001 (first entry)
XX

```

```

DE IGF-I oligonucleotide #1056.
XX
XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
XX cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
XX skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;
XX IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
XX growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
XX keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
XX hyperneovascular condition; hyperplasia; kidney disease;
XX neovascular condition of the retina; ss.
XX
OS Homo sapiens.
XX
XX WO200078341-A1.
XX
PD 28-DEC-2000.
XX
PF 21-JUN-2000; 2000WO-AU000693.
XX
PF 21-JUN-1999; 99US-0140345P.
XX
PR (MURD-) MURDOCH CHILDRENS RES INST.
XX
PA Wright CJ, Werther GA, Edmondson SR;
XX WPI; 2001-041421/05.
XX
PI Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT inhibits or reduces growth factor mediated cell proliferation and/or
PT inflammation.
XX
PS Example 8; Page 67; 201pp; English.
XX
XX The present invention relates to a method for ameliorating the effects of
XX skin disorders. The method comprises contacting the skin with an
XX antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
XX receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
XX inhibiting or reducing growth factor mediated cell proliferation,
XX inflammation and/or other disorders. The present sequence is an
XX oligonucleotide which can be used to design the antisense
XX oligonucleotides of the present invention (see AAF45151 and AAF45153-
XX F45161). The method is useful for ameliorating the effects of psoriasis,
XX ichthyosis, ptyriasis, ruba, pilaris, serborrhea, keloids, keratosis,
XX neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
XX hyperneovascular condition such as a neovascular condition of the retina,
XX brain or skin, growth factor-mediated malignancies, other sclerotic
XX disease, kidney disease, hyperproliferation of the inside of blood
XX vessels or any other hyperplasia
XX
SQ Sequence 15 BP; 8 A; 3 C; 2 G; 2 T; 0 U; 0 Other;
Query Match 13.4%; Score 9.8; DB 1; Length 15;
Best Local Similarity 84.6%; Pred. No. 1.2e+03;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Cy 911 TCTTTGGTCTTTG 923
Cb 15 TCAATGGTCTTTG 3

RESULT 1329
AAF70051/c
ID AAF70051 standard; DNA; 15 BP.
XX
XX AAF70051;
XX
XX 18-APR-2001 (first entry)
XX
XX Human TNFRSF11B gene ASO probe, SEQ ID NO: 107.
XX Human; TNFRSF11B; osteoclastogenesis inhibitory factor;
XX single nucleotide polymorphism; SNP; osteoclast recruitment;

```

Y osteoclast function; osteoporosis; metastatic bone disease;
 Y Paget's disease; rheumatoid arthritis; periodontal bone disease; ASO;
 Y allele-specific oligonucleotide; probe; ss.
 X Homo sapiens.
 X WO200104137-A1.
 X 18-JAN-2001.
 X 10-JUL-2000; 2000WO-US018803.
 X 09-JUL-1999; 99US-0143020P.
 X (GENA-) GENAISSANCE PHARM INC.
 X Chew A, Denton RR, Duda A, Nandabalan K, Stephens JC;
 X WPI; 2001-147175/15.
 X Human Osteoclastogenesis Inhibitory Factor nucleotides, comprising single
 X nucleotide polymorphisms, useful for studying e.g. osteoporosis, Paget's
 X disease and rheumatoid arthritis.
 X Claim 15; Page 23; 114pp; English.
 X The present sequence is a probe used to detect polymorphisms in the human
 X osteoclastogenesis inhibitory factor (TNFRSF11B). Polynucleotides
 X comprising one or more of twenty four novel single nucleotide
 X polymorphisms in the TNFRSF11B gene have been identified. TNFRSF11B
 X regulate osteoclast recruitment and function. An understanding of
 X variations in the gene should thus be useful in developing new therapies
 X for metabolic disorders caused by abnormal osteoclast recruitment and
 X function such as osteoporosis, metastatic bone disease, Paget's disease,
 X rheumatoid arthritis and periodontal bone disease
 X Sequence 15 BP; 7 A; 4 C; 3 G; 1 T; 0 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 15;
 Best Local Similarity 84.6%; Pred. No. 1.2e+03;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 Y 906 CATTTCCTTGGT 918
 b 15 CGTTTACTTGGT 3
 RESULT 1330
 BL48621
 D ABL48621 standard; RNA; 15 BP.
 X ABL48621;
 X 27-JUN-2003 (first entry)
 X Human GRID enzymatic target oligonucleotide #3.
 X Human; Grb2-related with Insert Domain; GRID; T-cell;
 X co-stimulatory adaptor protein; tissue rejection; graft rejection;
 X leukaemia; cytostatic; ss.
 X Homo sapiens.
 X WO200162911-A2.
 X 30-AUG-2001.
 X 23-FEB-2001; 2001WO-US005957.
 X 24-FEB-2000; 2000US-0184594P.
 X (RIBO-) RIBOZYME PHARM INC.
 X (GLAX) GLAXO GROUP LTD.

XX Jarvis T, Von Carlowitz I, Mcswiggen JA, Hamblin PA, Ellis JH;
 XX WPI; 2001-550088/61.
 XX New nucleic acid(s) for regulating the Grb2-related with Insert Domain
 XX (GRID) gene comprises using antisense and enzymatic nucleic acid
 XX molecules such as hammerhead ribozymes.
 XX Claim 4; Page 93; 108pp; English.
 XX The present invention relates to oligonucleotides that downregulate the
 XX expression of human Grb2-related with Insert Domain (GRID) gene. GRID is
 XX a T-cell co-stimulatory adaptor protein. The oligonucleotides are useful
 XX for modulating the expression of GRID, to treat conditions such as
 XX tissue/graft rejection and leukaemia. The oligonucleotides can also be
 XX administered in conjunction with other therapies such as radiation,
 XX chemotherapy and cyclosporin treatment. The present oligonucleotide was
 XX used to illustrate the invention
 XX Sequence 15 BP; 2 A; 6 C; 0 G; 0 T; 7 U; 0 Other;
 Query Match 13.4%; Score 9.8; DB 1; Length 15;
 Best Local Similarity 46.2%; Pred. No. 1.2e+03;
 Matches 6; Conservative 5; Mismatches 2; Indels 0; Gaps 0;
 QY 930 ATCCCTCCTCTTC 942
 Db 1 AUCUCUUCUCUC 13
 RESULT 1331
 AAF69383/C
 ID AAF69383 standard; DNA; 15 BP.
 XX AAF69383;
 XX 18-APR-2001 (first entry)
 XX Human IL4Ralpha gene probe #23.
 XX Polymorphism; human; interleukin 4 receptor-alpha; IL4R-alpha;
 XX allergic disease; probe; ss.
 XX Homo sapiens.
 XX WO200104270-A1.
 XX 18-JAN-2001.
 XX 13-JUL-2000; 2000WO-US019094.
 XX 13-JUL-1999; 99US-0143435P.
 XX (GENA-) GENAISSANCE PHARM INC.
 XX Chew A, Denton RR, Duda A, Nandabalan K, Stephens JC;
 XX Windemuth AK;
 XX WPI; 2001-103078/11.
 XX New isolated polynucleotide useful for the identification of therapeutics
 XX in allergic diseases is new.
 XX Claim 15; Page 42; 188pp; English.
 XX The present invention relates to polymorphisms of the human interleukin 4
 XX receptor-alpha gene (IL4R-alpha; see AAF5718 for the reference
 XX sequence). Polynucleotides comprising polymorphic gene variants are
 XX useful for therapeutic purposes. For example, where a patient may benefit
 XX from expression of a particular IL4Ralpha protein isoform, an expression
 XX vector encoding the isoform may be administered to the patient. It may
 XX desirable to decrease or block expression of a particular IL4Ralpha